Traffic Safety

JUNE 1961

A NATIONAL SAFETY COUNCIL PUBLICATION

18 Miles of Seat Belts

"PRO" TECHNIQUES FOR VACATION DRIVERS

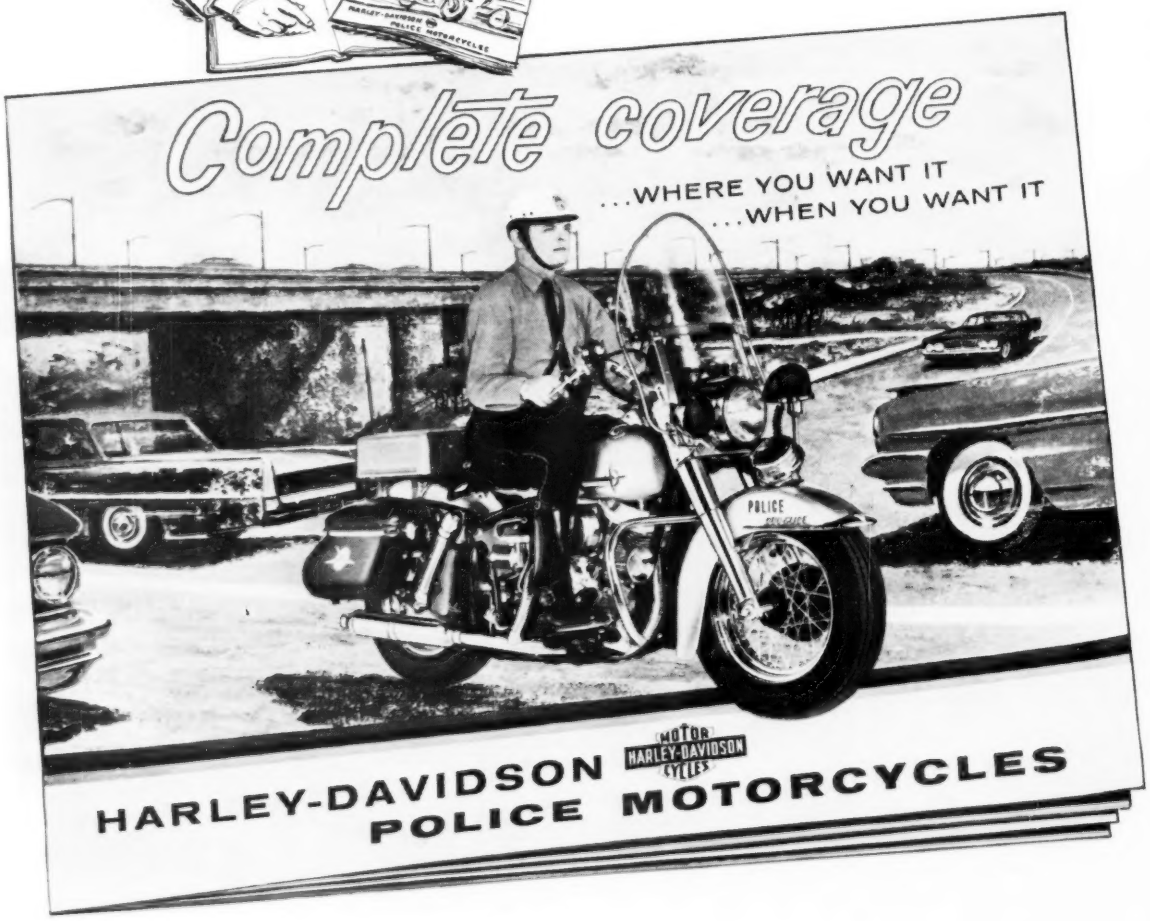
EMOTIONS AND TRAFFIC SAFETY

–See Research Review

SURVIVAL CAR II

Latest advance in passenger packaging

Here's one book
you can judge by
its coverage...



NEW police motorcycle brochure – get your copy now!

HARLEY-DAVIDSON MOTOR CO.
Dept. TS-6, Milwaukee 1, Wisconsin

Please send me a copy of your new police motorcycle brochure.

Name.....

Title.....

City..... Zone..... State.....

Harley-Davidson's new police motorcycle brochure gives you a detailed account of why Harley-Davidson police motorcycles are the first choice for fast-striking, hard-hitting law enforcement and traffic control. Packed with facts, features and illustrations, this handsome 12-page brochure covers both the versatile Harley-Davidson Police Solo and the all-purpose Police Servi-Car. Get your free copy now. Harley-Davidson Motor Co., Milwaukee 1, Wisconsin.

STRETCHING THE LONG ARM OF THE LAW . . .

HARLEY-DAVIDSON *Police Motorcycles*

Circle Item No. 1—Reader Service Card

Here's how you can improve driver safety records in your fleet!...

The EXPERT DRIVING SERIES

278.41 Experts Count 'Em All
Black and White 16mm sound

278.42 In Case Of Accident
Black and White 16mm sound

278.43 Preventable Or Not?
Black and White 16mm sound

278.44 For Experts Only
Color, 16mm sound

Four motion pictures designed to improve professional safe driving performance

This new National Safety Council training film series is based on the combined experience and knowledge of hundreds of member organizations with motor fleet operations. The series deals with four important driving topics: *Reporting all accidents, What to do at the scene of an accident, The concept of the "preventable" accident, and The concept of expert driving.* It's a film series that can help you train your drivers in important aspects of their job and, more important, will help you mold in them professional attitudes toward their job. Created by the National Safety Council, this series not only will train effectively but will hold your drivers' interest. The series is an investment that can be used in every fleet training program with good effects for many years.

Send for free brochure . . .
providing complete description of each film and costs.

NATIONAL SAFETY COUNCIL
425 NORTH MICHIGAN AVENUE • CHICAGO 11, ILLINOIS

THE SAFETY LIBRARY

(Monthly supplement to *Guide to Traffic Safety Literature*. Guide is available from NSC.)

by Lois Zearing, Librarian, NSC

Accidents

Accident Analysis of Freeway Interchange. Yoshiake Sadai. *Traffic Engineering*. March, 1961, p. 20-22.

American Standard Method of Recording and Measuring Motor Vehicle Fleet and Passenger Accident Experience. 1961, 10pp. American Standards Association, 10 E. 40th St., New York 16, N. Y. (DIS. 2-1960)

Road Accidents in Great Britain in 1960. John A. Lain. *Safety News*. March, 1961, p. 3.

A Safety Milestone for Motor Vehicle Fleets. Alfred Finch. The Magazine of Standards. March, 1961, p. 80-81.

'60 Traffic Deaths Hit 4-Year High of 38,200. *Automotive News*. March, 1961, p. 16.

The World's Biggest Auto Accident. Wesley S. Grewald. *Popular Science*. April, 1961, p. 4-5, 230-233.

Alcohol

When Words Fail Can Science and Law Halt Drunk Driving? *Medicine at Work*. April, 1961, p. 4-5.

Automobiles

Accident-proof—German Offers His Idea of Safe Auto. *Automotive News*. March, 1961, p. 16.

Motor Vehicle Safety Glass Meets Strict Requirements: Two Types Used for Greatest Possible Protection. *Automotive Safety*. February, 1961, p. 3.

Church Activities

CHP Officer Asks Churchgoers to Drive Safely. Wally Trobing. *California Highway Patrolman*. March, 1961, p. 15, 50.

Crash Injury Research

Auto Makers Grant $175,000 to Crash Injury Study: Cornell Program Awarded $500,000 in Three Years. *Automotive Safety*. February, 1961, p. 1.

Drivers and Driving

Characteristics of Negligent Drivers: Part 1 Control of the Negligent Driver. 50pp., 1961 charts, tables, exhibits. Division of Administration, Department of Motor Vehicles, Sacramento 9, Calif. (Report No. 8)

Emotion at the Wheel. Virginia Beardsley. Virginia Highway Bulletin, February, 1961, p. 7-8. (Reprinted from *Minutes*, Magazine of Nationwide Insurance)

Urges Training, Control of All Drivers. *California Highway Patrolman*. March, 1961, p. 29. (The president of Allstate Insurance urges thorough training and stringent control of all drivers)

Economics

Economic Losses Due to Traffic Congestion. R. Coguand. *International Road Safety and Traffic Review*. Winter, 1961, p. 23-33, 26-27.

The Cost of Traffic Accidents. *Traffic Digest and Review*. March, 1961, p. 2

Electronics

Electronic Highways. Joseph B. Bidwell, Albert F. Welch and Eugene A. Hanysz. *Highway Research Bulletin* 261, 1961, p. 50-60. Highway Research Board, 2101 Constitution Ave., Washington 25, D. C.

Standard Electronic Units Interconnect to Provide Flexible Digital Recording. Richard C. Hopkins. *Highway Research Bulletin* 261, 1960, p. 44-49. Highway Research

To Page 42

How Fleet Operators SAVE 3 WAYS with

Beam's AUTO SAFETY BELTS

New Low Wholesale Prices on belts for company cars and employees' personal cars . . .
Now you can reduce the high cost of ON-THE-JOB and OFF-THE-JOB auto accidents—with Beam's Auto Safety Belts

CUTS DIRECT EXPENSES of salaries to employees injured and unable to work, plus expense of training replacements . . . because safety belts reduce injuries over 60%, cut fatalities 50%, according to findings by Cornell University Auto Crash Center.

CUTS INDIRECT EXPENSES! By effectively reducing injuries and fatalities, Beam's Auto Safety Belts help keep your insurance rates down, prevent loss of company time and production, reduce attorney fees and other costs!

WHOLESALE PRICE SAVINGS: Beam's low wholesale prices permit installation of Safety Belts on all company owned cars—**PLUS** the extra protection of equipping employees' personal cars with belts, at substantial savings to them!

- Instant release metal-to-metal buckle
- 100% Caprolan webbing
- Belts test over 5,000 lbs.
- Exceed both SAE and Federal requirements
- Easy to install, transfer

SAVE LIVES — SAVE MONEY! — MAIL COUPON TODAY!

Send me net prices on Beam's Auto Safety Belts. Also literature and demonstration material to help me sell safety to my drivers.

☐ Send complete details on Beam's FLEET DISCOUNT PLAN for ON-THE-JOB Safety Belt protection.

☐ Send complete details on the "BEAM'S PLAN" for OFF-THE-JOB Employee Safety Belt protection.

NAME_____
ORGANIZATION_____ NO. OF EMPLOYEES_____
ADDRESS_____
CITY_____ STATE_____

PE 2-2275
Beam's
13th and North Robinson Oklahoma City, Okla.

Circle Item No. 2—Reader Service Card

Traffic Safety

Volume 58 Number 6 June 1961

A NATIONAL SAFETY COUNCIL PUBLICATION

IN THIS ISSUE:

Traffic Operations:

Sharp Toll Increase in March . . . . . *H. Gene Miller* 6
"Pro" Techniques for Vacation Drivers . . *Amos E. Neyhart* 8
18 Miles of Seat Belts . . . . . *Richard Williford* 12
Survival Car II 14
NUTI Offers New Police Training Opportunities 18
The Legislative Hopper 20

Public Support:

Radio Fleet Patrols Expressways 22
Rural Roads Can be Safer 24
Top Safety Films of 1960 26

Motor Transport:

YOU Can Change America's Driving Habits . . *Chris Imhoff* 32
They Out-Think Disaster . . . . . *W. D. Cook* 35

Research Review:

Quarterly Technical Section 51

Departments

The Safety Library	4	Mail Bag	28
Today's Traffic	7	Boosters	29
News from Capitol Hill	11	Fleet Posters	30
People in the News	16	Traffic Record	37
Coming Events	16	New Safety Equipment	45
News and Views	17	Safety Product Literature	46
		Advertiser's Index	50

TRAFFIC SAFETY is dedicated to the prevention of traffic accidents through the presentation of objective information and responsible opinion to official agencies, public support groups and the motor transportation industry. The views expressed do not necessarily reflect the beliefs or policies of the National Safety Council, but they are presented in the conviction that the pressing social problem of traffic accidents can best be resolved through freedom of expression and open debate.

EDITORIAL

Editor: Angela Maher
Associate Editors: Gerald Kaminski, Richard Williford
Contributing Editor: Jack Trimble
Editorial Director: Robert Meyer
Manager, Publications Dept.: Jack Horner

ART

Art Director: Ralph Moses
Cover Design: William Wendland

ADVISORY

Bertram D. Tallamy, Bureau of Public Roads *vice president for Traffic;* Mark Robeson, Yellow Transit Freight Lines, Inc., *vice president for Motor Transport, National Safety Council;* Harry Porter, Jr., *manager, Traffic;* Alfred C. Finch, *manager, Motor Transport.*

ADVERTISING

Advertising Manager: Fred Lubet
Production Manager: John Tribble

TRAFFIC SAFETY is published monthly by the NATIONAL SAFETY COUNCIL, 425 N. Michigan Ave., Chicago 11, Illinois. Copyright 1961 by National Safety Council. Printed in U.S.A. Entered as second class matter at the Post Office in Chicago, Illinois, under the Act of March 3, 1879.

The subscription price to TRAFFIC SAFETY is $4.50 per year (add 70 cents for foreign charges except to Canada and Pan-American Union). Prices on quantity lots will be quoted on request. All prices subject to a 10 per cent discount to National Safety Council members.

NATIONAL SAFETY COUNCIL
Chartered by the Congress of the United States
Howard Pyle, President
George C. Stewart, Executive Vice President
R.L. Forney, Secretary and Treasurer

Home Office: 425 N. Michigan Ave., Chicago 11, Ill.

San Francisco Office: 703 Market St., San Francisco 3, Calif.

New York Offices:
Field Service & General Information, 60 E. 42nd St., New York 17, N. Y.

Public Service Fund, 639-40 Chrysler Bldg., New York 17, N. Y.

BETWEEN STOPS

THE hat manufacturers are unhappy because President Kennedy seldom wears a hat. They would like him to make male headgear as popular as the First Lady has made the high-rise pill box.

Safety men would also like to see the President as a style setter —of safety styles, of course.

When it comes to selling an idea to the public, a nod of approval from a chief of state can outweigh reams of propaganda.

This is why German safety leaders were jubilant over a news photo showing Chancellor Adenauer buckling on his auto seat belt. It is also the reason safety men in the U.S. are disturbed when they read of over-the-speed limit trips of the Presidential party from the Maryland retreat to the White House.

Such top echelon haste seems to be in the American tradition—regardless of which party is in power. This is one area in which safety men of BOTH parties would like to see a New Frontier established.

SHARP TOLL INCREASE IN MARCH

by H. Gene Miller

MOTOR vehicle deaths in March increased sharply over the number for March a year ago. The total was 2,740, a 14 per cent increase over the 2,400 deaths in March of 1960.

The large increase in March does not necessarily indicate the beginning of an unfavorable trend in motor vehicle deaths, nor does it mean that the nation's motorists are driving less safely. The important fact is that the 1960 March total of 2,400 was the lowest March total in 11 years and far below the recent average of about 2,700 deaths. Therefore, while the current March total suffers in comparison with the total for the same month last year, historically, it was about average in number, and better than average when related to miles driven.

For the first three months of 1961, deaths were only 1 per cent higher than they were during the same months of 1960. The totals were 7,730 in 1961 compared with 7,670 in 1960. Because of the heavy snow storms in January and February of this year, and the exceptionally low total for March last year, it is difficult to determine what the trend is at this time. A definite trend should emerge in the next few months with the advent of spring weather and the seasonal increase in travel.

Traffic Summary

March	1961	1960	Change
Deaths	2,740	2,400	+14%
Three Months			
Deaths	7,730	7,670	+ 1%
Mileage (billions)..	16.8	16.3	+ 3%
Death Rate..	4.6	4.7	— 2%

Travel for the first three months is indicated to be about 3 per cent ahead of last year. This increase, coupled with the 1 per cent increase in deaths, produced a mileage death rate of 4.6 (deaths per 100 million vehicle miles). This is the lowest death rate on record for this period, and compares with 4.7 for the same months of 1960.

Disabling injuries during the first three months of the year are estimated at about 300,000. These are injuries resulting in disability beyond the day of the accident and do not include minor injuries which undoubtedly total hundreds of thousands more.

Among 49 states reporting March experience, 13 had fewer deaths than last March, two reported no change and 34 had increases.

For three months 22 states showed decreases, four reported no change, and 23 had increases.

Cities registered a 9 per cent increase in March, according to reports from 759 cities over 10,000 population. For three months, these cities showed a 6 per cent decrease.

There were 111 cities with fewer deaths, 139 had more deaths, 509 showed no change (mostly perfect records).

For three months, 209 had decreases while 207 had increases, with 343 showing no change.

In March, 571 of the 759 cities reporting had perfect records. Of these, the three largest were: Kansas City, Mo. (475,500); Long Beach, Calif. (344,200); and Rochester, N. Y. (318,600).

For three months 399 of the cities still had perfect records. Of these the three largest were: Bridgeport, Conn. (156,700); Evansville, Ind. (141,500); and South Bend, Ind. (132,400).

The three leading cities in each population group at the end of March, ranked according to the number of

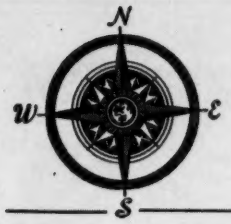
To Page 37

H. Gene Miller is director of the National Safety Council's research and statistics department.

Leading at the End of March

States

Vermont	—69%	Arizona	—12%	Richmond, Va.	—89%	Dallas, Tex.	—30%
Maryland	—33%	Indiana	—11%	Charlotte, N. C.	—83%	Detroit, Mich.	—27%
New Mexico	—30%	Utah	—10%	Kansas City, Mo.	—81%	Pittsburgh, Pa.	—27%
Hawaii	—30%	Louisiana	— 9%	Washington, D. C.	—74%	San Jose, Calif.	—25%
Delaware	—28%	New York	— 6%	San Antonio, Tex.	—68%	New York, N. Y.	—22%
Mississippi	—19%	Kentucky	— 6%	Baltimore, Md.	—56%	Buffalo, N. Y.	—22%
Georgia	—16%	Connecticut	— 4%	Akron, Ohio	—56%	San Francisco, Calif.	—21%
Ohio	—14%	Maine	— 4%	Cleveland, Ohio	—55%	Los Angeles, Calif.	—18%
New Jersey	—14%	Tennessee	— 3%	St. Paul, Minn.	—50%	Tampa, Fla.	—18%
Florida	—14%	Missouri	— 2%	Des Moines, Iowa	—50%	Dayton, Ohio	—17%
South Carolina	—13%	Massachusetts	— 1%	Albuquerque, N. M.	—50%	Oakland, Calif.	—15%
				Long Beach, Calif.	—47%	Phoenix, Ariz.	—13%
				Syracuse, N. Y.	—40%	Memphis, Tenn.	—11%
				Cincinnati, Ohio	—35%	Oklahoma City, Okla.	—10%
				Providence, R. I.	—33%	Louisville, Ky.	— 9%



Today's Traffic

Parking boomerang

Policewoman J. J. Freeman of Hamlet, N. C. recently found herself on the receiving end of a reverse application of the "do unto others" philosophy. Returning to her car after banking coins she had collected from the town's parking meters, she discovered—a ticket for overtime parking.

N. J. cars only half safe

Almost half of all vehicles registered in New Jersey were rejected as unsafe at inspection stations during 1960. This was 5 per cent above the 1959 rejection figure. Faulty brakes were the most common failure. Steering alignment was another frequent offender.

Tea and safety

A tea tippler, who is an avid reader of the one-sentence tag lines attached to Salada tea bags, reports sighting this gem recently: "Everybody should learn to drive, especially those who sit behind the wheel."

Clever, these French!

Drivers stuck in typically heavy weekend traffic in Paris, France, were slightly startled when they saw a Volkswagen calmly putt-putting up the Seine River. The driver had attached a motorboat propeller to the vehicle's engine and had sealed the car so that it would float. He announced that he would go as far as Le Havre on the water if the traffic jam continued.

Dance of death

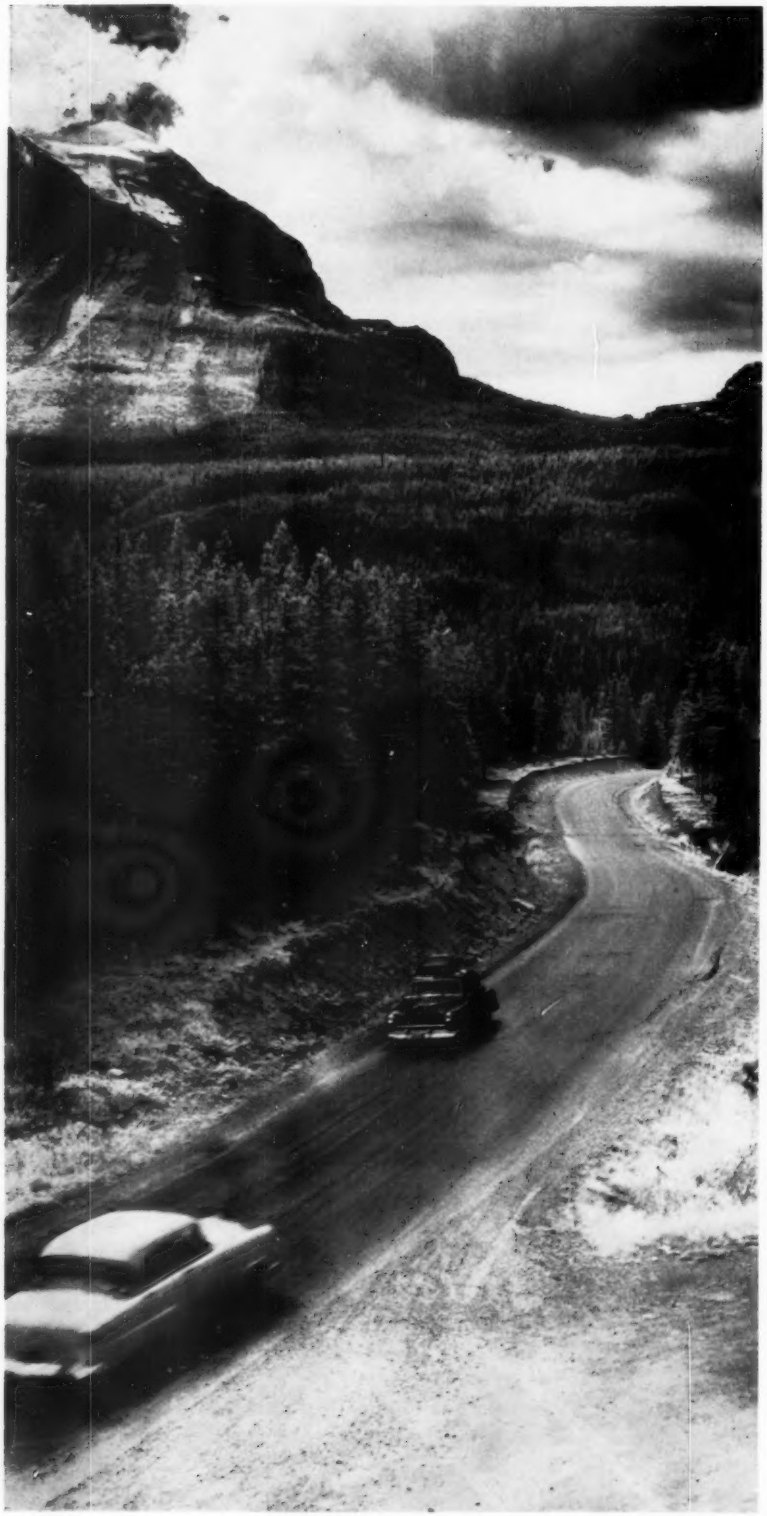
Illinois radio listeners are being warned to watch out for the "Go to Heaven Two-Step." A current radio safety spot announcement describes the dance as "dangerously simple. All you do is take one normal stride forward from a curbstone without looking either to right or to left. Then, take another stride forward. And, there you are . . ."

Were they midgets?

A Michigan State Highway Department traffic division employe is convinced that the new compact cars are equipped with elastic sides. He says he counted 13 people in a compact car during a recent traffic survey on M-60 near Cassopolis.

The quick and the drunk

Britain's Royal Society for the Prevention of Accidents has approved a device which tests driver reaction time after drinking. Here's how it works. The driver inserts a coin in the machine and attempts to stop the coin before it goes down. If he does it in less than 1.2 seconds, the coin is returned. If he fails, the coin is lost and a warning is given that reaction time is slow.



"PRO" TECHNIQUES FOR VACATION DRIVERS

An expert on driver education and fleet training passes along some tips that can make for a safer trip — whether the driver is a safety man, or the fellow who reads the safety man's propaganda.

by Amos E. Neyhart

WHAT would you do if your car went into a sudden skid? . . . if it ran off the roadway? . . . if a tire blew out?

Many a driver who considers himself skillful would be stumped by these questions. If confronted by any of these problems on the road, his ignorance could involve him in a serious accident.

Now that vacation time is here, motorists are heading for the road in droves—thus increasing their chances of encountering unfamiliar driving conditions and running into emergency situations.

Every driver should know what to do and should have practice in handling a vehicle under the different driving conditions. Emergency situations can usually be avoided if drivers use sound driving practices in the first place.

Here is my definition of sound driving practices. Sound driving practices are practices used by drivers considering their own physical condition and limitations, condition of the vehicle, roadway, weather, congestion, and any other factors that could get them into traffic difficulties.

Just what are some of these advanced driving practices and skills? To get the answer to this question, I wrote to a number of individuals that I respect in this business and I got what I expected—a list of driving practices that we don't use very often and the ones that we don't use too well.

I pass the list along here to help fellow traffic safety "pros" improve their own driving techniques, and to give them information to use in their efforts to up-grade the performance of the average driver.

1. Merging with traffic on freeways.

The sound driving practice is to drive in the accelerating lane at a speed that will permit blending with the traffic on the freeway and not cause the freeway traffic to slow down or stop. In other words, enter the freeway where there is an opening and not "horn in" ahead of fast moving traffic and cause many drivers to slow down or stop.

Of course, if we are the drivers on the freeway, we should permit the traffic to merge from the accelerating lanes.

2. Passing a slower moving vehicle.

The good driver takes command of the passing situation before the actual pass is made. He does not get close to the vehicle he intends to pass. He stays back so that he can check traffic to the rear, to the side, and then ahead. If conditions are favorable for a pass, he signals his intention to the driver ahead, and then makes a gradual, smooth pass. When he sees the vehicle just passed in his rear view mirror, he then moves smoothly over to the right hand lane.

Let's take a look at the passing situation where the driver gets too close to the vehicle that he wishes to pass. In the first place, he has failed to take command of the passing situation. Just as he makes an abrupt turn to pass—the driver behind him has the lane. Somebody has to yield or there is going to be a collision or side swipe. In the second place, by getting close to the vehicle ahead, he has to make an abrupt turn to the left to clear the vehicle and then an abrupt turn to the right in order to be in the passing lane. The chances are that this same driver

Amos E. Neyhart is director of the Institute of Public Safety, Pennsylvania State University; secretary of the National Committee for Motor Fleet Supervisor Training, and consultant on driver education for the American Automobile Association.

GENERAL DRIVING CHECK LIST

In rating professional drivers, Professor Neyhart notes seven important general points. You can see how you stack up on these points by using the following check list.

1. **Use of eyes**—Do you use eyes properly? Are you aware of danger? Do you do something about dangerous situations?

2. **Timing**—Do you use good timing when passing, changing lanes, determining following distances and in protecting your position?

3. **Signalling**—Do you signal your intentions through the proper use of position of vehicle on the roadway, speed, horn, hand signals and mechanical signals?

4. **Courtesy**—Do you practice acts of courtesy? Do you refrain from becoming disturbed? Do you refrain from running out of patience and taking chances? Do you give pedestrians and other drivers a break?

5. **General control**—Do you drive in a relaxed or sure manner—not over confident? Do you refrain from rationalizing by commenting on the condition of the car or blaming other drivers? Is your driving of the quality that causes your passengers to feel at ease?

6. **Smoothness**—Do you start, stop, make turns, pass other vehicles, etc., smoothly?

7. **Speed**—Do you obey speed limits and keep an even smooth speed or is your driving erratic?

will cut back before his car is far enough ahead to see the vehicle just passed in his rear view mirror.

3. Driving on ice.

Occasionally, when driving in mountainous country, vacationers will encounter ice.

For many years the Committee on Winter Driving Hazards has urged that drivers learn and use the technique of "pumping" brakes to slow down or stop on ice.

On glare ice, the driver cannot feel the point at which the wheels begin to lock, and with the increasing use of power brakes, it is not made any easier. Here the pumping technique is most helpful in stopping without losing steering control.

Pumping means applying the brakes quickly (locking them) for an instant, and as quickly completely releasing them for an instant. Repeat this —on and off, on and off, once or twice a second to bring the vehicle to a full stop. The effect is to give short intervals of maximum braking, alternated with short intervals of effective steering when brakes are released, and wheels roll.

4. Driving around curves.

Traction requirements when driving at high speeds, especially on curves, are so much greater than at low speeds that few drivers realize the scant margin of safety against skidding generally existing at high speeds.

When a vehicle rounds a curve, centrifugal force tends to throw it outwards. It is a force which builds up rapidly with speed. Thus, if the speed is doubled, centrifugal force will be four times as great.

If power is applied as we round a curve, a portion of this power acts to counteract centrifugal force by setting up frictional resistance at the tires.

If brakes are applied, we have a reverse direction to driving power, and have set up a force which aids centrifugal force to take the vehicle off the road.

Thus, the risk of skidding off the road on a curve is seriously increased by applying brakes, but it may, within limits, be reduced by applying power.

Drivers should, therefore, form the habit of slowing down to a safe speed before turns, then round the curve with

To Page 36

RACKET EXPOSED IN OHIO

The Lucas County (Ohio) grand jury recently blocked the operations of an alleged "safety solicitation" racket. According to the Lucas County prosecutor's office, the grand jury indicted 12 people on 25 counts—14 for larceny by trick, 10 for obtaining money under false pretenses and one for forgery. The case covered alleged operations in Pennsylvania and Michigan as well as Ohio.

Cooperating in the round-up of the ring were the Toledo Police Department, the Lucas County sheriff's office, the Lucas County prosecutor, the Erie County sheriff and prosecutor, United States postal inspectors and the Ohio State Highway Patrol.

Initial alertness of private citizens led to a two-month investigation which produced the evidence used in obtaining the indictments.

Grant Keys, Ohio's highway safety director, praised all who cooperated in the case.

"On behalf of safety interests everywhere we commend the public and private agencies which cooperated in securing these indictments," he said. "We hope the grand jury action alerts the general public to the unpleasant fact that shady operators often prey upon our universal desire to improve safety conditions, reduce accidents and save lives and property."

The operation in Ohio is not unique. Similar solicitation activities, occurring in various parts of the country, are brought to the attention of the National Safety Council from time to time.

While they take various forms, the general pattern is to collect funds to purchase some safety service for schools or official agencies—a service which may not be wanted by the beneficiary or may be greatly over priced.

The enterprising promoters of these ventures sometimes are glib enough to obtain the backing of local organizations (or to create the impression that they have obtained such backing). They often stay within the letter of the law, so alertness in spotting them and education of business people and local organizations regarding their activities are usually a community's best protection.

"It is deplorable that unscrupulous individuals sometimes victimize those who wish to contribute to the cause of safety," said Maj. Gen. George C. Stewart, executive vice president of the National Safety Council.

"The Ohio officials and citizens who halted such exploitation in their state merit high praise.

"The National Safety Council urges safety agencies throughout the country to exercise similar vigilance in their own communities. Far from helping the safety movement, these questionable safety promoters frequently do it much harm. Private citizens, business people and local organizations should be advised to check the credentials of safety solicitors before contributing to their projects. In particular, any claim by a promoter that his activities are endorsed by the National Safety Council should be checked directly with the Council."

Daniel H. Thompson

Daniel H. Thompson, assistant manager of the National Safety Council's public information department from 1942 to 1956, died March 29 at his home in Lombard, Ill., following a long illness.

A native of Indiana, Mr. Thompson joined the *Louisville Times* after his graduation from the University of Louisville in 1927 and became its magazine and drama editor. From 1936 to 1942, he was with the central division publicity department of the National Broadcasting Co. After joining the National Safety Council, he directed NSC's radio and television publicity.

He was an honorary Kentucky colonel and a member of the Radio Pioneers of America, the National Association of Public Relations and Sigma Delta Chi, the national journalistic fraternity.

Survivors include his widow, Mildred; a son, Daniel H., Jr., a Navy officer stationed in Japan; a sister, Mrs. Vivian Wareham, and two brothers, Maurice and Wesley.

NEWS FROM CAPITOL HILL

SAFETY programs and proposals have played a prominant part in the early days of the new Administration's term of office.

Traffic Safety

The President told Congress, in submitting a proposed bill to complete the interstate highway system by 1972 on a pay-as-you-go basis, that "our people need the safety . . . that this program helps provide." And in his special message to the Congress on housing and community development, President Kennedy said: "Nothing is more dramatically apparent than the inadequacy of transportation in our larger urban areas. The solution cannot be found only in the construction of additional urban highways—vital as that job is. Other means for mass transportation which use less space and equipment must be improved and expanded. Perhaps even more important, planning for transportation and land use must go hand in hand as two inseparable aspects of the same process." As a result, the President ordered the housing and home finance administrator and the secretary of commerce "to undertake an immediate and extensive study of urban transportation problems and the proper role of the federal government in their solution."

The secretary of commerce announced the formation of a policy planning group of experts to assist the department in its transportation responsibilities, with the immediate task being to undertake the joint study of urban transportation which the President has ordered. Three points were emphasized in this commerce department study: 1) "It is obvious that a successful attack on urban transportation problems involves both the development of adequate highways and urban mass transportation. The two are very closely related." 2) The interrelationship of all aspects of transportation (airports, rail terminals, truck and bus terminals and parking facilities, in addition to highways and transit). 3) Relationship of transportation problems with comprehensive land use plans.

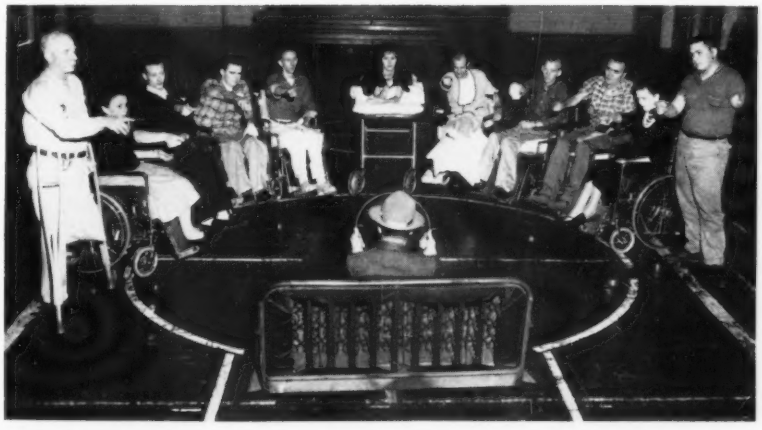
The Senate Housing Committee held hearings on S.345 (Williams plus 17 senators), a broadened version of S.3278 which was passed by the Senate last year. The present bill provides for a low-cost revolving loan fund of $250 million for equipment and facilities to improve mass transportation service. It also provides a matching grant program of $75 million for actual demonstration projects and comprehensive mass transportation planning. More than 20 companion measures have been introduced into the House. The bill's sponsor said: "We cannot renew our cities by just building new buildings under the urban renewal program. We must also have a mass transportation program, working hand in hand with other urban development programs." The bill would cover all forms of mass transportation, rail, bus, highway, and helicopter.

A special report prepared for the Senate Interstate and Foreign Commerce Committee, on commuter transportation in the New Jersey-New York-Connecticut metropolitan region, urged federal low-interest loans and broad federal, state and local tax aid as a means of modernizing commuter railroads. The report recommended that the rail plan should be coordinated with federal airport, highway, housing and urban renewal programs, and with state and local planning for the region.

The Roberts Committee on Health and Safety, in the House, also held important hearings, on three bills: the first one was H.R. 2446 (Roberts), to provide that hydraulic brake fluid shipped or sold in interstate commerce for motor vehicle use shall meet specifications prescribed by the secretary of commerce. In his opening statement in the hearings on this bill, Congressman Roberts noted that less than half the states had legislation regulating such fluid, and then commented: "If the states fail to act, the federal government has some responsibility to protect interstate commerce from the hazards resulting from this phantom killer of substandard brake fluid." The De-

To Page 44

UNANIMOUS VERDICT — GUILTY!



This picture, taken at the Woodrow Wilson Rehabilitation Center, Fishersville, Va., shows permanently injured traffic victims—paraplegics and amputees—pointing accusing fingers at the nameless careless driver. One of the victims lost his wife, child and father in the automobile accident which crippled him.

18 MILES OF SEAT BELTS

Bulldozers are common in the forest. This operator is protected by a hard hat, a seat belt and a heavy steel canopy that surrounds him.

That's how far the Forest Service's 13,500 seat belts would reach laid end-to-end

by Richard Williford

THE United States Forest Service has been using seat belts since 1954.

Forestry work is tough, and often dangerous, duty. Even when there's no full-fledged emergency like a forest fire, driving conditions in most areas are dangerous.

The men of the Forest Service put a lot of hard miles on the vehicles they use. Those miles are driven in all kinds of weather and over all types of roads. When a driver is winding down a treacherous mountain road or bumping through the brush to head off a forest fire, he has to have control of his vehicle. Forest Service drivers were quick to find that a seat belt would hold them securely behind the wheel.

More than seven years ago, Seth Jackson, a Forest Service safety man, went to his superiors and told them he was convinced that seat belts save lives and they could be useful to the service.

Jackson felt he could expect opposition to belt use service because he did not have many cases on record in the Forest Service in which lives might have been saved through the use of seat belts. Jackson asked the service's top brass to authorize his project by providing one set of seat belts to each region for experimental use. He asked for a special allotment of $100. Headquarters agreed and the project was under way.

Jackson's idea worked. By the end of 1955, the Angeles National Forest crew was fully equipped with seat belts. There were also 50 belts in use in Arizona and a dozen in Ohio.

Jackson had another idea. He thought there should be a central service for the circulation of seat belt information. He sold his supervisors on the idea, and soon a seat belt information service was operating out of Washington. It was based largely on the findings of the Automotive Crash Injury Research conducted at Cornell University.

Other Forest Service regions and National Forests soon picked up the idea of seat belts. The belts were made mandatory in the California region in 1956. By that time the service had 1,500 belts installed. mostly on an optional basis.

And then came the first report of injury decreased by the use of a belt. A report came in that one of the service's pickup trucks had skidded and tipped over. The driver had lost control of the vehicle while travelling about 50 m.p.h: on a paved road.

The driver reported, "I suffered no personal injuries other than initial shock. The truck is equipped with seat belts and a knock-out type of windshield which were instrumental in preventing injury. I feel that had the truck not been equipped with these devices, and I had not been wearing my belt at the time of the accident, I would no doubt not be writing this report, now."

Jackson says the Forest Service had an estimated $7,800 invested in seat belts, with 2,000 more belts on order.

That was back in 1956 and, as Jackson himself puts it, "The total cost was considerably less than one fatality —about $26,000.

"At least four more people were spared serious injury by 1957," says Jackson. "Since then our belt program has taken hold to the extent that 73 per cent of the fleet was equipped by the latter part of 1960."

Considering up-to-date figures, Jackson believes that at least 100 Forest Service employes have been saved from injury or death through the use of belts.

The Service's policy on belts is still on an optional basis. Seat belts are termed "a recommended practice" from the chief's office in Washington. Once they are installed, however, they must be worn at all times, regardless of the distance to be travelled or the length of time involved. The Forest Service now has 6,300 vehicles equipped with about 13,500 belts. It also has 40 belts in tractors, road graders and end loaders. Jackson believes they are worn 80 per cent of the time.

Forest Service drivers have also discovered the added plus in seat belt use—they lessen fatigue on long trips.

The Forest Service intends to vigorously continue the seat belt program because, as Jackson told the Federal Safety Council Seat Belt Symposium last fall, "We know it has saved lives."

The Forest Service does a mighty big job. Twenty-five thousand people work at the administration of timber sales and range management, planting timber stand improvements, road and trail building and airport construction and maintenance. Forest Service work also includes protection against fire and insects, the control of tree diseases and wild life management.

Operations are located in 46 states including Alaska, Hawaii and Puerto Rico. They are carried out with the use of a large fleet—more than 8,500 vehicles. The fleet—jeeps, cars, station wagons, and a wide variety of trucks —rolls up some 70 million miles annually. The bulk of the fleet is employed throughout the nation's 10 Forest Service regions in our less settled forested and mountainous areas where the real forestry work is carried on.

In spite of the nature of the work and the driving hazards inherent in it, the service's accident record is quite low. In 1959, the rate was only 0.69 which has been the average rate for several years.

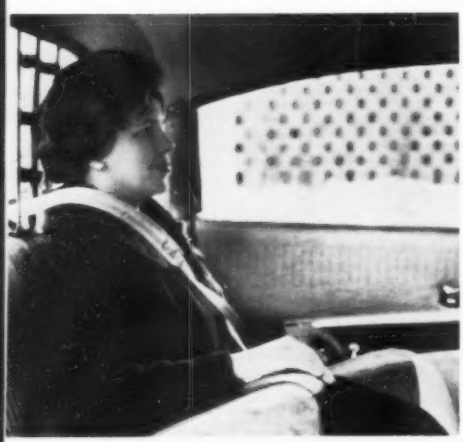
Road building and maintenance are a major part of Forest Service work. Many front end loaders and road graders are equipped with seat belts.

Forest Service operations cover 46 states from Alaska to Puerto Rico but center around National Forests.

This "Sno-Cat" is one of a variety of vehicles in the Forest Service fleet used in timberland management.

Capsule chair, rectangular steering wheel, shoulder harness and lap belts protect driver in case of a crash.

Driver's seat has roll-over bars and padded head rest which will retain head against a 5,000 pound blow.



Web-like strap gives whip-lash protection. Passenger also has arm rests, lap belt and shoulder harness.

SURVIVAL CAR II

Latest advance in passenger packaging

A NEW "car of tomorrow" has made its appearance. It's a modified four door sedan, incorporating safety design elements which its sponsor—Liberty Mutual Insurance Co. — says "make it virtually impossible for the occupants to be seriously injured in a crash."

The new "Survival Car II,"—which was designed by Frank Crandell, Liberty Mutual chief engineer—is the second to be created and built by the company. The first, developed jointly with Cornell Aeronautical Laboratories, was known as the "Survival Car" and was unveiled in 1957. That car featured revolutionary design innovations built into a specially constructed body. The present car has been designed to demonstrate that it is possible to build comparable safety features into a conventional production-line automobile without recourse to radical structural changes.

Containment Is Key

The design of both cars was based on an eight year research program conducted by Liberty Mutual. The results of this program proved conclusively that most severe auto collision injuries can be prevented or ameliorated if the occupants can be securely contained in their seats at the time of impact.

Twenty-four design features have been incorporated into the new safety car. Most unusual is the use of two high-backed bucket seats to replace the conventional three-place front seat. These "capsule" chairs, provided with seat belts and shoulder harness, will stay in place in head-on collisions at speeds of 30 m.p.h. In addition, the "capsule" chairs will withstand similar 30 g impacts and support a 5,000 pound load, when struck from both the sides and the rear of the car. The front seat of an ordinary automobile is usually torn from the floor at much lower impact stresses.

Several important safety design features in the car's steering mechanism are: a flexible steering shaft that will give in a crash situation, thus preventing the driver's being impaled on the shaft; a steering tube that will telescope away from the driver during a crash in order to prevent chest and face injuries; a rectangular steering wheel positioned so that it will reduce the danger of kneecap injuries when the wheel telescopes toward the dashboard, and a steering wheel of smaller diameter for greater visibility. In addition, the special steering wheel provides improved maneuverability, faster turning ability, and greater driving stability.

Other design features are: a safety brake device that automatically switches the hydraulic lines to provide two-wheel brake action should one of the hydraulic lines fail; an automatic fire-control system utilizing carbon dioxide to smother any fire in the engine compartment; a roll-over bar in "capsule" seats for greater head protection; restraining seat belts and shoulder harnesses on all seats; whip-lash injury prevention devices on all seats; laminated safety windshield with double-weight filler to afford greater resistance to penetration, but with no greater blow upon the head; "saflex" interlayer windshield to eliminate 95 per cent of all ultra-violet rays and reduce eye fatigue; tinted glass win-

dows to reduce the heat, normally entering the car through the transparent glazing, by approximately 30 per cent; arm supports to minimize driver and passenger fatigue, and side reflection mirrors for greater driver visibility. Besides the foregoing features designed for the safety of driver and passengers, the car has a smooth, cleanly designed hood to reduce injuries should a pedestrian be hit.

The new Survival Car II is a completely functional and operational 1960 model BelAir Chevrolet. It thus differs from the original Survival Car of 1957 which was clearly a theoretical prototype.

Restraint in the original Survival Car was primarily at the hips of the passenger and driver. This meant that a sufficient envelope of movement had to be made available in the event of a front-end crash so that their heads would not hit the automobile or come in contact with each other.

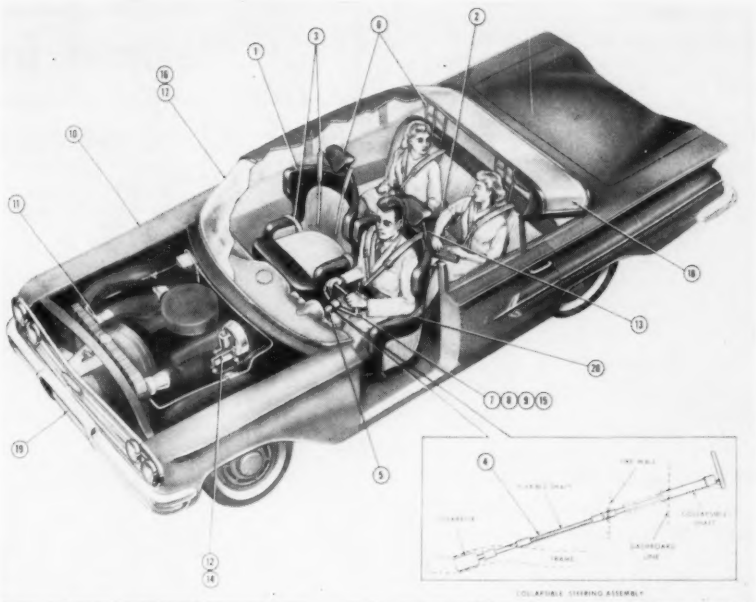
Based upon scientifically controlled crash tests, the necessary clearance of movement for an average person would have to be approximately 45 inches. Measurement of the interior showed that the maximum distance between the front seat and the instrument dashboard averaged 27 inches. The distance between the location of the hips of the rear-riding passengers and the front seat was 26 inches maximum.

Redesign Indicated

At the outset, it was intended to overcome this short distance of rear seat clearance by moving the seat back towards the trunk. However, the configuration of the 1960 low priced touring cars did not allow this because of the low height of the rear window. Moving the rear seat back would not allow sufficient head room for the occupants. The immediate problem was to redesign the known hazards out of the car in order to reduce the effects of injuries in a crash. Experience with the Survival Car had shown that the greatest protection for the driver and passengers could be achieved by basic redesign of the car's interior.

Through crash testing techniques it was determined that it was of extreme importance that driver and passengers

Turn Page



Designed for Safety

The drawing illustrates 20 important design considerations, all calculated to improve driver and passenger safety, increase visibility, reduce potential hazards and injury and conserve life. The call-out numbers, 1 through 20, show locations of these features.

(1) Capsule chairs so designed and so tied to the floor that they will restrain the driver and passenger in a 30 m.p.h. collision against a 5,000 pound blow and a deceleration force of 30 g's in a front, rear or lateral crash. (2) Protection of passengers in rear against a 5,000 pound blow. (3) Restraining lap belts and shoulder harnesses on all seats. (4) Flexible steering shaft that will buckle in a crash situation. (5) Steering tube that telescopes a total of 8 inches during a crash. (6) Whip-lash protection on all seats to retain the head in the event of a rear-end crash. (7) Rectangular steering wheel to prevent breaking or bruising of kneecaps. (8) Driving wheel of reduced diameter for greater visibility. (9) Improved maneuverability, faster turning ability and greater driving stability through utilization of special driving wheel. (10) Unit body construction with high energy absorption factor that will collapse and ruin car at moment of severe impact, but protect passengers from bodily injury. (11) Automatic fire control system utilizing carbon dioxide. (12) Safety brake device. (13) Roll-over bars in capsule chairs for greater head protection. (14) Power brakes. (15) Power steering. (16) Laminated safety windshield with double weight filler to afford greater resistance to penetration. (17) Saflex interlayer windshield to eliminate 95 per cent of ultraviolet rays. (18) Tinting of all glass windows reduces the heat load normally entering the car through the transparent glazing by approximately 30 per cent. (19) Reflective license plates for greater visibility at night. (20) Support of arms to reduce driver and passenger fatigue.

be restrained against forward deceleration and rearward deceleration forces. In intersection accidents, the traveler must also be restrained in the lateral direction where these lateral forces are equal to the deceleration forces.

For a 30 m.p.h. collision, the design criteria, therefore, should be as follows:

1. Design all restraining devices for a head-on crash equal to a deceleration force of 30 g's.

2. The design forces for the lateral intersection crash should also be of the magnitude of 30 g's.

3. The design criteria for the whiplash or rear end accident should be no less than 12 g's.

Design for Collision

In order to overcome the lack of movement clearance in today's automobiles, it was decided to contain the passengers in capsule-like chairs so as to minimize body and head movement in a collision.

Initial analysis showed that it would be necessary to protect the driver and passengers in all 360 degrees—to the front, at the rear, and at both sides. The objective was to see to it that no occupant of the passenger-safe car would be vulnerable to severe injury of any nature.

Capsule Chair

The first consideration was the proper design of the capsule chairs that would replace the conventional front seat. These chairs have sufficient strength to withstand a 5,000 blow from the front, the left, the right, and the rear. The arm rests provide one of the protective mediums in a side crash, either from the left or right. The wings of each chair afford the same protection at the shoulders of the driver and passengers.

Because of their size and shape, and in order for the driver and passengers to enter and leave the vehicle with little or no difficulty, both "front-seat" chairs had to be designed so as to swing in either direction or to be rotated through a full 360 degree circle.

In addition to the swinging action, it was necessary that one of the capsule chairs, the driver's, be capable of being moved forward and back in order to compensate for different leg lengths of various drivers.

To Page 48

People in the News

▶ Ralph R. Bartelsmeyer, chief highway engineer of the Illinois Division of Highways, has been named president of the American Road Builders' Association.

▶ James C. Johnston, formerly acting director of industrial safety and hygiene, Bureau of Naval Weapons, Department of the Navy, has joined the headquarters safety staff of the Post Office Department, Washington, D. C. His major responsibilities will be the department's motor vehicle safety program, with special assignments in industrial safety and industrial hygiene.

▶ Edward J. Nugent has been appointed court administrator of the Yonkers, N. Y., City Courts. He was formerly traffic consultant for the Insurance Institute for Highway Safety.

▶ E. J. Thomas, chairman of the board of Goodyear Tire and Rubber Co., has been elected chairman of the Automotive Safety Foundation.

▶ Capt. Tom Hickman, who gained world-wide fame as a Texas Ranger captain during the 1920's and 1930's, has been elected chairman of the Texas Public Safety Commission.

▶ Rudolph F. King, former Massachusetts registrar of motor vehicles, has been named special advisor to the governor of Massachusetts on all aspects of highway safety.

▶ Fred Huleen, director of personnel, Boeing Airplane Co. has been named president of the Seattle-King County Safety Council.

▶ Alva Brewer has been appointed commissioner of motor vehicles for Indiana. John Barton, a former state police career officer, is the new superintendent of the Indiana State Police.

▶ Barry Minear has been appointed director of the driver license division of the Iowa Department of Public Safety.

▶ Larry Mosiman has been named assistant director of the Greater Kansas City Area Safety Council.

▶ T. J. Smith, sales manager, Hill Printing Co., has been elected president of the Greater Waco Safety Council.

▶ R. W. Ellison, manager of industrial relations, Service Pipe Line Co., has been elected president of the Tulsa Area Safety Council.

▶ Sam Hartman, president, Coast Insurance Agency, has been elected president of the San Diego County Traffic Safety Council.

▶ C. A. Von Hoene, vice president of Southern Bell Telephone and Telegraph Co., has been elected president of the Louisiana Safety Association.

▶ Brig. Gen. James C. Marshall (ret.) has been appointed commissioner of highways for Minnesota.

Coming Events

June 5-9, New York City

Regional Traffic Court Conference. Fordham University. Contact Traffic Court Program, American Bar Center, 1155 East Sixtieth St., Chicago 37, Ill.

June 13-14, Hartford, Conn.

Connecticut Safety Conference, Hotel Statler. Contact Charles Wooding, Conference Chairman, Wallingford Steel Co., Wallingford, Conn.

June 15-17, Corbondale, Ill.

Eighth Annual Conference of the Campus Safety Association at Southern Illinois University. Contact James E. Aaron, Program Chairman, Safety Education Center, Southern Illinois University, Carbondale, Ill.

Aug. 21-26, Washington, D. C.

World Traffic Engineering Conference. Sheraton-Park Hotel. Conference will consist of two meetings: Thirty-first Annual Meeting of the Institute of Traffic Engineers (Aug. 21-23) and International Sessions in Traffic Engineering, Aug. 24-26. Contact either David M. Baldwin, 2029 K Street, N.W., Washington 6, D. C. or M. H. Perlowski, 32 Chesham Pl., London S.W. 1.

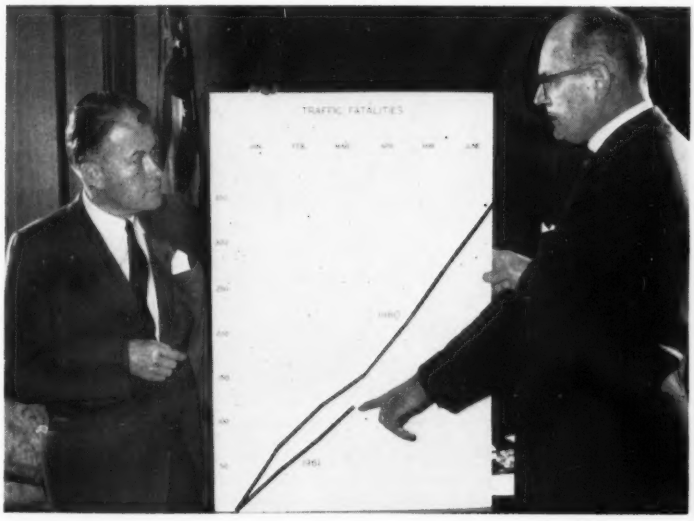
Aug. 31-Sept. 1, Poland Springs, Maine

Thirty-fourth Annual Maine State Safety Conference. Poland Springs House. Contact Arthur F. Minchin, secretary, Department of Labor and Industry, State House, Augusta, Maine.

News & Views

Noble Sutton (right), assistant manager of the Hoosier Motor Club, was recently elected president of the Indiana Traffic Safety Foundation. Here he is receiving congratulations from Jack J. Rosebrough, manager of the Farm Bureau Insurance Companies and retiring president of the foundation. Rosebrough was elected chairman of the board of trustees.

Earl W. Schuon (left), comptroller, Oldsmobile Division of General Motors, presents Harold Lillie (center), executive director of the Safety Council of Greater Lansing, with a check for the Oldsmobile and Fisher Body's 1961 contribution to the council. Council president Irwin E. Hinchey, industrial relations director for the Fisher Body Lansing plant, looks on.



Gov. Bert Combs of Kentucky watches as Glenn Lovern, state public safety commissioner, points with alarm to graph showing the state's climbing 1961 death toll. Governor Combs has called a Governor's Safety Conference, which will meet in Lexington on June 13 and 14, to discuss methods of curbing the upward trend.

NUTI OFFERS NEW POLICE TRAINING OPPORTUNITIES

The Traffic Institute of Northwestern University has increased the number of grants-in-aid awards for its nine month Traffic Police Administration course starting in September. The course has been tailored to give police chiefs and the officers they send for training a choice of three major study areas—police management, traffic programs, and training.

Here are some questions about the new training program format answered by Bernard R. Caldwell, director of the Traffic Institute, and Gerald O'Connell, director of training.

Who can go?

Caldwell: Men with command, services or staff responsibilities and those qualified for such an assignment. We urge police chiefs to encourage interest in this program of training by all members of their department with the rank of sergeant or above. Then the selection of candidates can be made from among the best qualified men throughout the department.

Where does the money come from?

Caldwell: The Insurance Institute for Highway Safety has provided funds for 40 awards, or grants-in-aid. These range up to $1,750 for a limited number of officers. The typical grant will be for tuition, which is $960, but may include other funds to cover other expenses. The recipients of grants are determined by a selection board, with the awards divided between state police agencies and municipal departments. This is the largest number of awards ever offered.

What's behind the change in the training program?

Caldwell: With more traffic safety services demanded of police, the police organization has become more complex. The top police administrator must, consequently, rely on his administrators and supervisors to smoothly, efficiently, and effectively carry out the traffic law enforcement program. The Traffic Police Administration program has been improved and expanded to allow us to train these administrators and supervisors.

What is new about the program?

O'Connell: Police agencies differ in how they conduct their traffic programs. There are differences in the methods used and the objectives sought, both dependent upon the special conditions prevailing in a particular locality. As these methods and goals vary, the departments' need for men with professional training differ. This calls for greater efficiency in the distribution of the training product, which means there should be ever-increased flexibility in the kind of training being offered.

For these reasons the "long course" opening this fall will offer a choice to the student of three major areas—training, police management and traffic operations.

Caldwell: It means simply that the new TPA students will get to concentrate more of their study on certain subject areas. These are to be determined by the particular needs of the department. What a man will specialize in will be determined largely by his chief. If the department is weak in training, the student will probably be asked

to become efficient in this area. This will of course be fully discussed with the chief by our staff.

How will the training be divided?

O'Connell: It will go like this. The course will be divided into three quarters to conform to the University's regular academic year. During the fall quarter all students will study Highway Transportation, Police Management I, Traffic Programs I, and General Education. These are conducted concurrently—a specified number of hours of each day being devoted to each subject.

But in the winter quarter, the student officer may select *one* of three optional subjects; Training, Police Management II, or Traffic Programs II. General Education is required of all students in this quarter. Actually, the officer begins his specialization in the winter quarter.

In the spring quarter, the officer may again select one of the three study areas—Training II, Police Management III, or Traffic Programs III.

For example, an officer may select Training I in the Winter Quarter and then go on with Training II in the Spring Quarter. But he does not have to follow a sequence. He may, if he so desires (although in practice his choice will be largely determined by his chief) take Training I in the Winter Quarter and then switch to either Police Management III, or Traffic Programs III in the Spring Quarter. Each of the study areas in the Winter and Spring Quarters are *entities*. Police Management II, for example, is *not* a prerequisite to taking Police Management III.

When he finishes the course the officer will return to his department with a range of skills which he can adapt to a variety of police problems. He will have been trained to think and perform in terms of modern police management. His personal abilities will have been developed through courses in general education. His technical competence will have been strengthened in police traffic functions and extended to such related areas as traffic engineering and motor vehicle administration.

Caldwell: It means the man can go back home and be able to perform staff work for the chief, assume command or supervisory duties, develop and guide a departmental training program, and serve as liaison between the department and other groups working to solve traffic problems. I believe every chief will welcome this kind of training.

O'Connell: The chief knows what areas of his administration need strengthening. This plan gives him a chance to correct these weaknesses.

What is the outlook for police training?

Caldwell: The problem of traffic accidents has become inextricably involved with congestion; these can no longer be treated separately, either by different agencies or through different methods. Moreover, the problem is growing in an unsystematic way; the number of accidents increases, for example, at a faster rate in one place than in another.

The police department still represents the leading agency in any program of traffic accident reduction. It is still the front line agency most immediately and directly concerned with drivers and accidents. Because of two basic factors—the changing character of the traffic problem, and the diffusion of traffic functions among a larger number of participating groups, the need for management training in police traffic administration has grown tremendously since World War II.

When the men we begin training this September, and their successors in future TPA courses, return to their departments they will carry with them not only the full range of administrative and technical skills which have always characterized the TPA graduate, but also a bonus of specialized knowledge and competence to meet real local needs.

Tom Wolf (left), Traffic Institute Training staff, and Robert L. Donigan (next to Wolf), General Counsel of the Traffic Institute, discuss speed measuring equipment with three officers attending a recent "Long Course."

Bernard R. Caldwell, director of the Traffic Institute, and Gerald O'Connell, director of training, discuss new flexible training schedule for the expanded course made possible by the Insurance Institute for Highway Safety.

THE LEGISLATIVE HOPPER

A roundup of significant traffic safety legislation

Driver Education and Improvement Schools

New Bills Introduced

Idaho—S. 202—requires persons aged 14 to 16 to complete driver training courses and increases driver license fees to finance program.

Michigan—H. 654—requires school districts to maintain driver training courses during regular school year. S. 1331—repeals requirement that driver education courses be completed before operation of motor scooter.

Missouri—S. 271—provides for driver education courses for all senior high school students.

Ohio—S. 476—limits time students may spend on driver training to 36 hours of regular school time.

Action and Additional Information

Maine—H. 735—authorizes schools to contract for driver education courses—withdrawn, House.

Maryland—H. 70 — increases learner permit fee from $1.00 to $4.00 and uses proceeds for high school driver training —passed House.

Massachusetts—H. 1828—requires Registrar to assign inspector to driver training schools to determine if accidents are caused by operators of such schools—reported to next annual session, House.

New Mexico—H. 525—increases driver license fees and allocates proceeds of increase to public school driver training—passed both Houses.

Utah—H. 222—requires local school districts to conduct driver education classes—passed House. H. 226—relates to issuance of driver instruction permits; raises minimum age to 16 years unless applicant has completed a high school driver education course — passed both Houses.

Executive Action

Arkansas—S. 158—encourages school districts to establish driver education programs—vetoed.

Idaho—H. 286—authorizes Department of Law Enforcement to fix minimum standards for driver training courses for students between 14 and 18 attending public and private schools—approved.

Juvenile Drivers

New Bills Introduced

California—H. 2264—raises minimum age for temporary driver permit from 16 to 17.

Illinois — H. 497 — raises minimum driver age for driver license to 18.

Minnesota—H. 1040—fixes age 18 as minimum for driver license issuance, but permits restricted licenses for persons over age 15. S. 1069—raises minimum driver license age to 16.

Missouri—S. 270—prohibits issuance of driver license to person under age 18 who has not completed driver training course.

Ohio—H. 921—prohibits issuance of regular driver license to person under age 16.

Rhode Island—S. 278—prohibits operation of vehicle by minor if vehicle contains intoxicating beverages.

Action and Additional Information

Minnesota—H. 327—denies driver license to person under age 18 who has not completed driver training course—amended, passed House. H. 443—raises minimum age for issuance of driver license from 15 to 16—amended, passed House.

South Dakota—H. 768—prohibits minors from driving between midnight and 5 a.m.—killed House.

Wisconsin—H. 161—provides for issuance of restricted license to driver between age 16 and 18—indefinitely postponed, House.

Executive Action

Montana—S. 55—amends eligibility requirements of persons 15 years old for instruction permits. S. 109 — relates to parents approval of minor's driver license application—both approved.

Radar—Speed Measuring Devices

New Bills Introduced

California—H. 2376—authorizes Highway Patrol to use radar to enforce speed limits.

Illinois—H. 634—prohibits use of electric speed detecting devices unless operated between 200 feet and 1,000 feet beyond sign warning of use thereof.

Action and Additional Information

New York—H. 3067—provides that radar information shall not be admissible in speed cases unless warning signs have been posted—passed House.

Pennsylvania—S. 79—authorizes use of radar devices in timing speed—passed Senate.

Executive Action

Georgia—S. 162—prohibits law enforcement officers, except Highway Patrol members, from using radar devices in speed limit enforcement—approved.

Motor Scooters—Motorcycles

New Bills Introduced

Hawaii—H. 764—requires motorcycle, motor scooter and motorbike riders to wear safety helmets.

Wisconsin—H. 407—regulates motorized go-karts.

Action and Additional Information

Arkansas—H. 333—permits cities to license bicycle and motor scooter operators —withdrawn, House.

Massachusetts—H. 2097—prohibits operation of motorcycles or other two wheel vehicles during certain hours—referred to the next annual session, House.

Seat Belts

New Bills Introduced

California—H. 1964—requires new vehicles sold in state after January 1, 1962, to be equipped with anchors for seat belts. H. 2220—requires that driver training vehicles be equipped with seat belts.

Hawaii—H. 888—requires vehicles to be equipped with seat belts.

Michigan—S. 1268—requires installation of seat belt anchors on cars manufactured after January 1, 1962.

New York—S. 3661—prohibits sale of seat belts after June 30, 1962 unless constructed and installed as required by Motor Vehicle Commissioner.

Ohio—H. 679—requires anchors for seat belts on new cars sold after Jan. 1, 1962.

Pennsylvania—H. 909—prohibits operation of vehicles not equipped with safety belt anchors. H. 989—requires seat belts for school bus passengers.

Action and Additional Information

Illinois—H. 287—requires installation of seat belts in front seat of all new cars—passed House.

Iowa—H. 325—requires safety belts on vehicles sold after December 31, 1961—indefinitely postponed, House.

New York—S. 25—requires that vehicle manufactured or assembled after June 30, 1962 shall be equipped seat belt anchors for each passenger—passed both Houses; Senate concurs in House amendments.

Chemical Tests—Drunk Driving—Narcotic Drugs

New Bills Introduced

California—H. 2353—prohibits possession or consumption of alcoholic beverages in a vehicle.

Hawaii—H. 453—prohibits consumption of alcoholic beverages in motor vehicles. H. 1061—provides chemical tests for persons suspected of drunk driving.

Michigan—S. 1359—permits chemical tests for persons accused of intoxication.

Missouri—H. 413—provides for use of chemical tests in drunk driving cases.

North Carolina—S. 96—prohibits operation of vehicle while under influence of any drug. S. 97—provides for scientific tests for intoxication in criminal cases involving drunk driving.

Rhode Island—H. 1370—provides mandatory driver license revocation for refusal to submit to chemical tests for drunk driving cases.

Wisconsin—S. 294—adopts implied consent law for drunk drivers.

Action and Additional Information

Idaho—H. 67—requires revocation of non-residents operating privilege for drunk driving conviction—passed House; killed Senate.

Indiana—H. 365—adopts implied consent law for person suspected of drunk driving effective September 1, 1961—killed House.

Massachusetts—H. 451—fixes penalty for driving under influence of narcotic drugs—passed House. H. 2162—amends penalties for drunk driving and establishes certain tests as prima facie evidence of intoxication—reported next annual session, House.

Nebraska—LB 99—provides for use of breath or saliva specimen for chemical tests in drunk driving cases—passed House.

Nevada—S. 167—requires suspension of driver license on first conviction of drunk driving—passed Senate.

New Jersey—H. 151—adopts drunk driver implied consent provisions as condition to obtaining vehicle registration—killed House; reconsidered and amended, House.

New Mexico—S. 112—provides implied consent for chemical tests in drunk driving cases—passed Senate.

West Virginia—H. 251—provides for chemical tests of motorists accused of driving under influence of alcohol or drugs—killed House.

Executive Action

Arkansas—H. 358—relates to operating of vehicle by narcotic addicts. S. 225—provides for admission of chemical test evidence in drunk driving cases—both Approved.

Indiana—S. 424—relates to offense of driving under influence of liquor or drugs—vetoed.

Montana—H. 99—establishes periods of suspension and revocation of driver license for driving under influence of liquor or drugs—approved.

North Dakota—S. 89—provides that arresting officer may determine which body fluids are to be used in tests for intoxication—approved.

South Dakota—H. 911—relates to use of chemical tests in drunk driving cases—amended, passed both Houses; vetoed.

Miscellaneous

New Bills Introduced

Wisconsin—H. 36—makes it unlawful for any railroad vehicle to block any crossing longer than eight minutes. H. 347—requires State Highway Commission to install white wooden crosses along highway at scenes of fatal accidents.

Action and Additional Information

New York—H. 1398—prohibits requiring police officer to issue fixed or minimum number of traffic tickets—passed both Houses.

Utah—H. 159—amends definitions in motor vehicle laws; amends traffic regulations; bars confusing flashing lights along roadways; requires alternately flashing red lights on school buses; requires clearance lamps on buses, trucks, or trailers wider than 80 inches; regulates design and installation of seat belts; requires safety chains on trailers except pole trailers and fifth wheel-type semi-trailers—passed House.

Executive Action

Minnesota—S. 164—requires stopping by vehicle transporting LPG prior to crossing railroad grade crossing. H. 409—deletes language permitting emergency vehicles to go wrong way on one-way streets—both approved.

Oregon—H. 1029—relates to establishing safety signals and other services at highway-rail crossings—approved.

Washington—S. 89—abolishes conditional yielding of right-of-way when making left turns—approved.

Motor Vehicle Inspection

New Bills Introduced

Colorado—S. 249—prescribes standards and specifications for hydraulic brake fluids.

Federal—H. 2446—provides for specifications to be made by the Sec. of Commerce to assure safe and efficient hydraulic brake fluids for motor vehicles to promote highway safety.

Maryland—H. 940—requires new vehicles to be equipped with safety glass.

Ohio—H. 686—prohibits sale of hydraulic brake fluid not meeting standards fixed by Highway Safety Director.

Pennsylvania—H. 686—requires use of laminated safety glass.

Action and Additional Information

Kansas—S. 342—establishes standards for brake fluids and provides for regulation of sale of such fluid—passed both Houses.

Maryland—S. 280—requires all new vehicles registered after June 1, 1961 to have turn signals—passed both Houses.

Pennsylvania—S. 101—provides system for inspection of brake linings and prohibits sale of unapproved linings—passed Senate.

Executive Action

Colorado—S. 74—requires safety chains or cables in towing of motor vehicles and trailers; exempts fifth wheel-type semi-trailers—approved.

To Page 49

Communities planning Fourth of July safety programs might take a tip from Laurinburg, N. C. For two years the Laurinburg Police Department and the Scotland County Rescue have sponsored a safety rest stop, where free ice water and snow balls are dispensed under a shady tree and a police officer distributes safety literature. Over the Independence Day holiday last year, between 5,000 and 6,000 travellers stopped for rest and refreshment.

RADIO FLEET PATROLS EXPRESSWAYS

Retired Policemen Continue to Serve Detroit Motorists

DETROIT'S Lodge and Ford expressways are now being patrolled by radio station WKMH's "White Safety Fleet" as a public service to motorists. This traffic safety patrol is composed of four radio-equipped white station wagons that roam the expressways each morning and evening for a total of six hours each day.

The patrol is under the direction of James A. Hoye, Detroit's former deputy commissioner of traffic. The four men who drive the mobile units are retired Detroit police officers who wear their old uniforms and badges marked "retired." The combined careers of the safety patrol represent a total of 137 years of traffic service.

Every morning before dawn, the five men take their stations to report on-the-spot traffic conditions throughout the city. While the four patrolmen cruise the expressways, alert for changing traffic conditions, accidents and emergencies, Hoye mans radios and telephones and directs the patrol's operations. The patrol operates during all weather conditions.

Each quarter hour from 6:30 to 9:30 in the morning, and from 3:30 to 6:30 in the afternoon, the patrolmen do a round-robin, live broadcast that includes reports on weather and traffic conditions, suggestions on which routes to avoid and which to travel. They are on the air 24 times a day.

In their white, clearly marked station wagons, the men have become known to the million-plus drivers in the Detroit area as the expressway motorists' friends. Their reputation for offering assistance has made them a welcome sight to one stranded motorist after another.

Each of the WKMH traffic patrol cars carries a portable container of gas. With his compliments, the officer puts gasoline in the stalled car. If it's a flat tire, he radios for help or takes the driver to the nearest garage.

Sometimes the patrol car runs into more serious problems. On one occasion, a car involved in an accident contained a mother-to-be. Her husband had gone to get help when the WKMH patrol officer reached the scene. It was at this point that the woman realized she was going to be a mother a lot sooner than expected. The officer radioed for an ambulance, helped transfer the lady to it, and she was rushed to a hospital for safe delivery of her baby.

Another time a patrol officer happened along just after a woman driver had collapsed at the wheel of her car. After radioing information of the tragedy and ensuing traffic tie-up, the officer stepped out of his car and rerouted traffic.

On his way home to Iowa, a paraplegic, driving a specially controlled car, had been misdirected onto the expressway during the rush hour. He was so unnerved by the heavy traffic that he had to pull off the road. A WKMH patrol officer spotted him, drove his car off the expressway for him and radioed for help. A Detroit motorcycle policeman safely escorted him and his family to the proper highway and sent them on their way.

"High Test, Please"

The safety patrol drivers run into some funny incidents, too, such as the case of the man with the stalled Cadillac. This status-conscious fellow had run out of gas and was stalled on the expressway. But when a traffic patrol officer stopped and offered him some gas, he refused it because it was regular and not "high test."

Once an officer stopped to help a woman who had a flat tire. When he offered to drive her to a garage, the woman said no. She wanted the officer to change the tire.

Incidents such as these make life interesting on Detroit's expressways for WKMH patrol drivers. The men are glad for the chance to remain active after retirement age and to continue their public service work.

Not long ago, the advertising director of a Detroit newspaper ran out of gas at the height of the morning rush on the Lodge expressway. It wasn't long before the white WKMH station wagon appeared with a gallon of gas. The grateful motorist called this "thoughtful action" a "marvelously gracious service."

At the invitation of WKMH, Traffic Court Judge John D. Watts recently rode the expressways in one of the Traffic Safety Patrol cars. The judge was impressed with what he heard and saw. He made two of the round-robin broadcasts himself. The judge thanked WKMH "for the service being rendered to the people of the state of Michigan. It is indeed, paying dividends in lives saved."

Bell Lady Gophers Form Club

In the interest of promoting good, safe driving the Bell Telephone Co. of Minnesota has organized a Women's Defensive Driving Club. It is composed of 40 supervisory employes from various locations in the state, all of whom have taken the Northwestern Bell Telephone Co.'s driver training course. This is the same program which resulted in better than average accident experience for the company and therefore prompted the club to share it with other women's organizations throughout the state.

Organized in Minneapolis in 1958, the program consists of training a qualified woman driver from each interested women's group, so that she may offer the same course to her group.

The curriculum is not designed to teach driving, but to try to improve habits of people already driving. It is presented in an eight-hour course which consists of a check of physical qualifications, classroom work, a written check-off questionnaire, a discussion period and a road test in the trainee's car.

To qualify for the training course each club or group must meet the following qualifications: (1) The club must have a minimum of 10 members who can receive training within 30 days. (2) A licensed, intelligent and well-mannered club member with a clear traffic record, must be chosen to take the training course. (3) The trainee must register with the local Bell Telephone office. Schedules are then made out for day or evening classes. Training takes two days.

One or two representatives from each women's organization are trained by a member of the Defensive Driving Club. These representatives are then provided with appropriate material to aid them in offering the course to members of their respective groups.

Upon completion of the 16-hour course, each instructor is issued an instructor's permit, the necessary teaching materials and report forms to be filed with the club within ten days after she completes the instruction course.

The Minnesota Safety Council has endorsed the program through mailing of club brochures to local safety councils and interested groups in the state. Both the Greater Minneapolis and St. Paul Safety Councils have lent their support to the program. Newspaper publicity on the program has appeared in the majority of daily and weekly papers throughout the state and many radio stations have mentioned the program in their newscasts.

The program is of a continuing nature and will be conducted as long as there are persons desiring training.

Traffic Guide Available

The fourth volume of the *Guide to Traffic Safety* is now available. The *Guide*, formerly the *Index of Traffic Safety Information*, brings together pertinent information on traffic safety according to subject interest.

The fourth volume covers publications printed during 1959 received in the Library of the National Safety Council. Books, pamphlets, and magazine articles included contribute either to the technical aspects of traffic safety or to the development of traffic safety programming. Small leaflets intended for mass educational distribution are not included.

The cooperation of all in the traffic safety field is asked in order to constantly improve the value of the *Guide to Traffic Safety Literature*. Contributions for indexing may be sent to the Library of the National Safety Council.

The Safety Library page in TRAFFIC SAFETY, serves as a monthly supplement to the Guide.

Two helpful lists, "Addresses of Periodicals Indexed" and "Directory of Publishers and Organizations," appear at the end of the guide. To secure any item listed, write directly to the publisher.

Rural Roads can be safer

National Farm Safety Week spotlights year-long emphasis on highway hazards

Using the farm tractor for an all-purpose runabout is a dangerous practice. Don't use a tractor for trips not directly related to field work.

PRESIDENT Kennedy has proclaimed July 23-29 as the 18th annual National Farm Safety Week. This special week is sponsored jointly by the National Safety Council and the U. S. Department of Agriculture and is endorsed by leading farm organizations. Traffic Safety Day will be observed on July 27.

The theme of the seven-day safety campaign is "Safety Is a Family Affair." The purpose of the observance is to promote safety and accident prevention on American farms—in the field, in the home and on the highway.

There are more accidental deaths in farming than in any other major American industry. The National Safety Council is urging everyone with an interest in the welfare of farm residents to participate in National Farm Safety Week.

"Accidents claimed the lives of 11,700 farm residents in 1959—a tremendous waste of lives," said NSC President Howard Pyle. "Every farm accident is both a personal tragedy and a blow to the economy of our nation. It is imperative that we take every possible step to reduce the terrible toll of accidental death on the farm. Accident prevention does work and farm people can help improve it."

National Safety Council farm safety programs throughout the year are especially emphasizing rural highway and farm machinery safety—two areas of accident prevention that have been termed "critical."

Forty-five per cent of the fatal accidents to farm residents in 1959 were the result of motor-vehicle accidents; 74 per cent of all motor-vehicle accident fatalities occurred on rural highways in 1959. There has been a continual increase in rural motor-vehicle fatal accidents—26 per cent from 1949 to 1959. Night driving is considerably more hazardous than day driving in rural areas. Nighttime accidents on main rural roads reach a peak rate between 2 a.m. and 4 a.m.

Slow moving vehicles are one of the major problems of rural highway travel. Many of them are inadequately lighted or lack proper identification with which to warn motorists.

It is up to the operators of slow moving farm vehicles to practice courtesy whenever they can. When it is possible, the farmer should pull his equipment onto the shoulder and al-

low faster moving traffic to pass. Farmers should make certain that only mature, responsible persons are permitted to drive farm vehicles on the highway as well as in the fields.

The farmer should be willing to pull off the roadway for his own protection, and should flag his equipment before pulling it out onto the highway.

Utilization of a farm tractor as an all-purpose runabout is a dangerous practice that can sharply increase the chance of a serious accident. In many states, the use of farm tractors as utility vehicles is becoming an increasing problem in highway safety.

The farm tractor is not built or equipped for all-purpose travel. The increasing tendency of farmers to jump on the tractor for short trips not directly related to field work must be discouraged because the more the tractor is used on highways, the greater the accident risk run by the operator.

Besides offering no protection for the driver, the farm tractor has poor brakes, instability and low speed. Tractor operators have been involved in accidents while going to town for groceries or parts, hauling produce, or taking passengers down a muddy lane to a hard surfaced road. Farm tractors have been found in use for just about every errand or job imaginable. Farmers, in some cases, were driving tractors because they did not have a driver's license.

A tractor won't respond like a car, therefore, it is easier and safer to use a car or pick-up truck than to try to transfer one's driving habits to the tractor. Tractor operators should be urged to allow extra time when crossing travelled roads and not to try to beat approaching cross traffic.

Another frequent hazard encountered on country roads is the blind corner. Rural intersections are often obscured by high crops, brush or large trees. Farmers can perform a valuable public service by clearing the corners of fields which border on intersections.

Farmers can also protect themselves and others by keeping driveways clear so that they can see traffic before pulling onto the road and so that they can be seen by drivers on the road.

Highway-rail crossing safety is an area of rural highway safety vitally important to farm residents.

To Page 50

A valuable public service is performed by farmers who clear high crops, brush or large trees from their fields which border on intersections.

By clearing driveways so that they can see traffic before pulling onto the road and so they can be seen, farmers can help to protect people.

Slow moving vehicles are one of rural highway travel's major problems. If possible, pull equipment on shoulder to allow faster traffic to pass.

Announce selection of

TOP SAFETY FILMS OF 1960

THE National Committee on Films for safety has awarded Bronze Plaques to eight non-theatrical motion pictures and a series of television spots as outstanding safety films of 1960.

Ten non-theatrical films, one theatrical film and a series of television spots have been voted Award of Merit certificates.

The safety films committee, which represents 23 national organizations, annually recognizes outstanding new films on occupational, traffic and transportation, general and home safety by conferring Bronze Plaques. The committee seeks to improve the public's knowledge of safety through visual means.

Henry G. Lamb, director of technical services, American Standards Association, is chairman of the committee. William Englander, director of films and posters for the National Safety Council, is secretary.

The 1960 award winners:

Occupational

Motion Picture (Plaque)

Hard Hats and Thinking Caps. Produced by Mode-Art Films for American Bridge Division, United States Steel Corp.

The High-Low Bid. Produced by Employers Mutuals of Wausau for self.

Motion Picture (Award of Merit)

Propellant Plus Heat. Produced by Thiokol Chemical Corp. for self.

The Quota. Produced by Pilot Productions, Inc. for Construction Machinery Division, Clark Equipment Co.

Safety is Always Our No. 1 Business. Produced by Caterpillar Tractor Co. for self.

Static Electricity. Produced by Kennedy Productions, Inc. for American Gas Association.

Traffic and Transportation

Motion Picture (Plaque)

Driver Education Series—1960. Produced by Ford Motor Co. for self.

Expert Driving Series. Produced by Gilbert Altschul Productions for the National Safety Council.

The Silent Witness. Produced by Dynamic Films, Inc. for The William S. Merrell Co.

To See Ourselves. Produced by Aetna Casualty Surety Co. for self.

Motion Picture (Award of Merit)

Auto, U. S. A. Produced by Dynamic Films, Inc. for Perfect Circle Corp.

Look—Stop Backing Accidents. Produced by Gilbert Altschul Productions for the National Safety Council.

Safety Through Seat Belts. Produced by Charles Cahill and Associates, Inc. for U. S. Public Health Service and University of California, L. A.

Using Your Traffic Records. Produced by Audio-Visual Center, Michigan State University, for Highway Traffic Safety Center, Michigan State University.

Home Safety

Motion Picture (Plaque)

Safe at Home. Produced by Advantage Enterprises for Merck Sharp & Dohme.

General Safety

Motion Picture (Plaque)

Our Obligation. Produced by Los Angeles City Fire Department for self.

Motion Picture (Award of Merit)

The Accident Investigation Board. Produced by Leonard Anderson Associates for United States Air Force.

Be Water Wise—Boating. Produced by U. S. Air Force for self.

Theatrical Motion Pictures

Award of Merit

How to Have an Accident at Work. Produced by Walt Disney Productions.

TV Spots and Shorts

Bronze Plaque

Safety Clips. Produced by National Film Board of Canada for self.

Award of Merit

Buckeye Safety Parade. Produced by Ohio Department of Highway Safety and Ohio State University for self.

Entries

The following is a list of all films entered in the contest's traffic and motor transport categories.

Non-theatrical Motion Pictures

Auto, U. S. A. — 27 min., color and B & W, Tv/No. Inspirational. Reviews reducing of traffic congestion and accident problems through planning. *Sponsor*—Perfect Circle Corp., Hagerstown, Ind. *Producer*—Dynamic Films, Inc.

Can You Stop in Time—8¾ min., color, Tv/No. Instructional. Describes need of professional drivers to know stopping distance factors. *Sponsor*—National Association of Automotive Mutual Insurance Companies, 20 N. Wacker Dr., Chicago 6, Ill. *Producer*—Dallas Jones Productions, Inc.

City Driving — 22 min., B & W, Tv/O.K. Instructional. Demonstrates important city driving techniques—especially for driver education students. *Sponsor* — Ford Motor Co., Motion Picture Department, The American Road, Dearborn, Mich. *Producer*—Ford Motor Co., Film Services.

Debbie's Safety Lesson—18 min., color, Tv/O.K. Instructional. Shows safety precautions for youngsters starting school. *Sponsor*—California Traffic Safety Foundation, 660 Market St., San Francisco 4, Calif. *Producer*—Cine-Tele Productions.

Driving Under Special Conditions—19 min., B & W, Tv/O.K. Instructional. Stresses hazard factors during adverse conditions—especially for driver education students. *Sponsor*—Ford Motor Co., Motion Picture Department, The American Road, Dearborn, Mich. *Producer* — Ford Motor Co., Film Services.

Emergencies in the Making—14¼ min., color and B & W, Tv/O.K. Instructional. Outlines types of traffic emergencies and how best to combat them. *Sponsor*—AAA Foundation for Traffic Safety, 1712 "G" Street, N. W., Washington, D. C. *Producer* —Calvin Productions, Inc.

Expert Driving Series (Series of 4), 10 min. each. *Sponsor*—National Safety Council, 425 N. Michigan Ave., Chicago 11, Ill. *Producer*—Gilbert Altschul Productions.

Experts Count 'Em All—B & W, Tv/O.K. Instructional. Stresses value of professional drivers making reports of even minor accidents.

In Case of Accident — B & W, Tv/O.K. Instructional. Informs professional drivers of proper procedures at time of an accident.

Preventable or Not — B & W, Tv/O.K. Instructional. Explains meaning of preventable accidents to professional drivers.

For Experts Only — Color, Tv/No. Inspirational. Emphasizes excellence of driving performance through Safe Driver Awards.

For the Road—13½ min., B & W, Tv/No. Inspirational. Designed for voice-over open and close, film shows sequences of drinking at bar before driving. *Sponsor* —None. *Producer*—WJZ-TV, News Department, Television Hill, Baltimore, Md.

Highway Driving — 17 min., B & W, Tv/O.K. Instructional. Demonstrates basic safe habits for highway driving. *Sponsor*— Ford Motor Co., Motion Picture Department, The American Road, Dearborn, Mich. *Producer*—Ford Motor Co., Film Services.

In Step with Safety—14 min., color and B & W, Tv/O.K. Instructional. Portrays to students right and wrong conduct on school buses. *Sponsor*—Divco-Wayne Corporation, Richmond, Ind. *Producer*—The Carson Co., Inc.

Intersection Safety—10½ min., color, Tv/No. Instructional. Presents to professional drivers basic rules for handling certain types of intersection accident situations. *Sponsor* — National Association of Automotive Mutual Insurance Companies, 20 N. Wacker Dr., Chicago 6, Ill. *Producer*—Dallas Jones Productions, Inc.

It Takes Two to Crosswalk—6¼ min., B & W, Tv/No. Inspirational. Designed to inform Toronto pedestrians of new crosswalk system. *Sponsor*—Metropolitan Chairman's Pedestrian Safety Committee, City Hall, Toronto, Canada. *Producer* — Chetwynd Films Ltd.

Jerks that Irk — 10¾ min., color, Tv/O.K. Inspirational. Illustrates some driving habits and discourtesy that irritate other motorists. *Sponsor*—MFA Insurance Companies, Columbia, Mo. *Producer*—MFA Insurance Companies.

Look—Stop Backing Accidents — 10 min., B & W, Tv/O.K. Instructional. Demonstrates professional drivers' backing problems and how to avoid them. *Sponsor* —National Safety Council, 425 N. Michigan Ave., Chicago 11, Ill. *Producer*—Gilbert Altschul Productions.

Produced for You—3 min., color and B & W, Tv/No. Inspirational. Dramatizes an accident striking close to a person who condones violations. *Sponsor*—Acorn Films of New England, Inc., 465 Stuart St., Boston, Mass. *Producer*—Acorn Films of New England, Inc.

Safety Through Seat Belts—12¾ min., B & W, Tv/O.K. Inspirational. Documents collision tests proving value of seat belt use. *Sponsor*—U. S. Public Health Service and University of California, L.A., 405 Hilgard Ave., Los Angeles 24, Calif. *Producer*—Charles Cahill and Associates, Inc.

The Safest Township Anywhere — 27 min., color. Inspirational. Narrates story of township that organized for all-out safety. *Sponsor* — General Motors Corp., Public Relations, General Motors Bldg., Detroit, Mich. *Producer*—The Jam Handy Organization.

Security Clearance — 21 min., color, Tv/No. Inspirational. Points up importance of proper checking and installation of brakes. *Sponsor*—Marshall-Eclipse Division. The Bendix Corp., Box 538, Troy, N. Y. *Producer*—Robert Fisher Productions.

The Silent Witness—28 min., B & W, Tv/No. Inspirational. Shows case study of use of intoxication tests in traffic court. *Sponsor*—The William S. Merrell Co., Cincinnati 15, Ohio.. *Producer* — Dynamic Films, Inc.

Theobald Faces the Facts—13½ min., color and B & W, Tv/O.K. Inspirational. Discusses some drinking-driving factors—primarily for high school students. *Sponsor* —National Women's Christian Temperance Union, 1730 Chicago Ave., Evanston, Ill. *Producer*—Cal Dunn Studios.

To See Ourselves—14½ min., color and B & W, Tv/O.K. Inspirational. Portrays average motorist who thinks other driver is always wrong. *Sponsor*—Aetna Casualty & Surety Co., 151 Farmington Ave., Hartford, Conn. *Producer* — Aetna Casualty & Surety Co.

Using Your Traffic Records—20¾ min., color, Tv/O.K. Instructional. Outlines use of traffic records system for better enforcement and engineering. *Sponsor*—Highway Traffic Safety Center, Wells "D," Michigan State University, East Lansing, Mich. *Producer* — Audio-Visual Center, Michigan State University.

Winter Driving — 23¾ min., color, Tv/O.K. Instructional. Illustrates driving techniques for safer driving on snow and ice. *Sponsor*—None. *Producer*—Bureau of Public Roads, Dept. of Commerce, 1717 H Street, N. W., Washington 25, D. C.

Witness to an Accident—11 min., color and B & W, Tv/? Inspirational. Points out method used by police officer on accident investigations. *Sponsor*—The Insurance Institute of Indiana. *Producer* — Audio-Visual Center, Division of University Extension, Indiana University, Box 277, Bloomington, Ind.

You and Your Bicycle — 13¾ min., color and B & W, Tv/O.K. Instructional. Outlines a bicycle safety program, with helpful hints for all riders. *Sponsor*—None. *Producer*—Robert M. Carson Productions, Inc., 660 W. Fairbanks, Winter Park, Fla.

TV Spots and Shorts

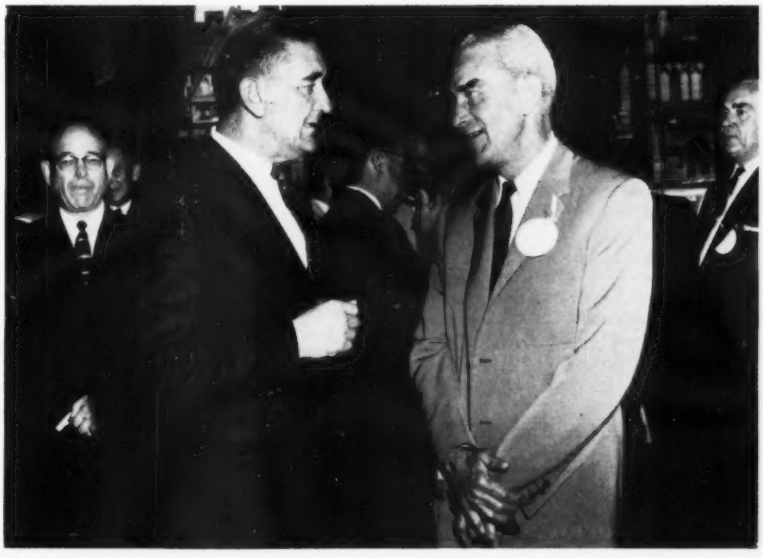
Buckeye Safety Parade—Series of 11 (50 seconds ea.), color and B & W, Tv/O.K. Instructional. *Sponsor*—Ohio Department of Highway Safety and Ohio State University, Agriculture Extension Service, 240 S. Parsons Ave., Columbus 5, Ohio. *Producer*—Ohio Department of Highway Safety and Ohio State University.

Safety Clips — 60 seconds, B & W, Tv/O.K. in Canada. Inspirational. *Sponsor* —National Film Board of Canada, 3255 Cote de Liesse Road, Montreal 9, Quebec. *Producer*—National Film Board of Canada.

A Statistic Speaks—80 seconds, B & W, Tv/O.K. Inspirational. *Sponsor*—Greater Los Angeles Chapter, National Safety Council, 3388 W. Eighth St., Los Angeles 5, Calif. *Producer* — Ray Bloss, Animation Photography and Telemation, Inc.

To Make Streets Safe After Dark—3½ min., color and B & W, Tv/O.K. Inspirational. *Sponsor*—Reader's Digest Association, Inc., Pleasantville, N. Y. *Producer*—Vavin, Inc.

Traffic Safety Spots—Series of 9 (one min. ea.), B & W, Tv/O.K. Instructional. *Sponsor*—M. S. U. Highway Traffic Safety Center, Michigan State University, East Lansing, Mich. and Traffic Safety Association of Detroit, 1902 Buhl Building, Detroit, Mich. *Producer*—M. S. U. Highway Traffic Safety Center and Audio-Visual Center, M S U.



Ald. H. F. Jensen, lord mayor of Sydney, chats with Julien R. Steelman, chairman, International Road Federation, Washington, D. C., at the Pacific Regional Conference on Roads held recently in Sydney. This was the first such conference to be held in Australia. Representatives from 17 nations attended.

THE MAIL BAG

Positive Barriers

A copy of your excellent publication TRAFFIC SAFETY is before me and I have read a number of the other issues. I have never seen anything in the magazine on improving traffic safety by means of safety devices *built into* highways. The emphasis seems to be on driving practices and vehicle design.

There is one simple, relatively inexpensive device, which would reduce the death rate sharply and almost immediately. This is the installation of positive barriers between the opposing, center lanes of multilane highways. This device completely stops head-on collisions.

Excellent barriers, which have been proved effective by exhaustive testing, are available. They can be used on most present four lane highways and certainly should be included in all new construction.

Harry W. Roche
Chula Vista, Calif.

A story on barriers appeared on page 23 of our June 1960 issue.

Wake-up Music

Having driven many miles at night over long distances, I have become persuaded that one of the contributing factors to danger on the highways is the content of all-night radio shows. Much of what comes out is David Rose or Jackie Gleason "mood" music, undoubtedly excellent for helping insomniacs and lovers, but no help to the driver who had a hard day at the office, then out to dinner, and now driving his snoozing wife back to their blue heaven in the suburbs.

I recommend that the following be adopted as a matter of public service by radio broadcasters:

(1) Stations located along expressways get together and set up a schedule so that one station will provide quick-tempo music —Overture to Carmen, Sousa Marches, not just rock and roll—along the route to provide complete coverage.

(2) Stations announce periodically to persons within range the call letters and frequencies of stations broadcasting "driving music." In turn, the "driving music" station can advertise the "music to hold hands by" station nearby, for those who are too much in love to go to sleep.

This idea may not appeal to broadcasters whose romantically inclined early-morning listeners appear to outnumber the drivers. But if it keeps one driver from becoming mesmerized by the white line and reflector posts of the turnpike it is worth it.

I am sending a copy of this idea to the National Association of Radio and Television Broadcasters.

Lionel Goulet
Commander, U. S. Navy
Carrier Division Twenty

Friends Take Hint

Recently, while driving at the posted speed of 35 m.p.h., I entered an intersection, on a green light. Hearing a siren I looked up and saw an ambulance coming through against the red light at a high rate of speed. The ambulance struck the back third of my car, completely spinning it around.

Because I had a seat belt, which was fastened, instead of being thrown out the door or through the windshield, I remained upright and able to control my car and to bring it to a stop so that it did not careen into parked cars or into the other lane of traffic.

The police officers were all agreed that the fastened seat belt was responsible for saving me from severe injury or death.

Although it was not a pleasant experience, already I can see worthwhile results from it, for so many of our friends have now had seat belts installed in their cars.

Kathleen Mackersie
(Mrs. William Mackersie)
President, Woman's Auxiliary,
American Medical Association

Persistent Purchasers

Our experience in trying to purchase auto safety belts may be of interest to the Council. Recently we purchased a new car and wanted to buy new belts. Four years ago we bought two sets for our car and though we used them steadily they were not worn but we did think new ones could be more readily installed than the old ones.

We spent several days trying around here—from Toms River to Asbury Park. Yes, we found several stores did carry them but none had "approved" ones. One pair looked fairly good until we noted the lip-like edge on the clamp. I thought this could readily be caught in my pocketbook handles and might open the clamp. We did not buy them. We tried dozens of places—most of them did not carry them—"no one asks for them."

In desperation we drove to Camden feeling sure in so large a city we could find them. We went to every store and shop along the highway and on city and town streets that might carry such an item—always the same answer—no call for them. That day we called at least 20 places—but could get no belts.

Knowing the value of belts we finally had our old ones removed from the car and fastened into the new car.

Do you think many people would go to all that trouble to get belts? Few people are sold on the idea, but I am sure our experience shows how futile your campaigns have been. Let me add this—the dealer who sold us the car would have installed a new set for $25, but our old ones are "approved" and cost only about half. Cannot something be done to get supply houses to carry reasonably priced belts? We talk belts to all our friends but most think of them as unnecessary. They are intelligent people, but cannot be convinced.

I thought you should know about one couple's recent experience. We would not have a car without belts—but always hope never to "need" them.

Yours truly,

Mathilde E. Prichard
(Mrs. George W. Prichard)
Beachwood, N. J.

Retractable Belts

. . . found your article, "A Seat Belt Could Save Your Life," most interesting and enlightening.

While I have had practically no experience with safety belts in automobiles, I have observed them. However, I travel regularly by commercial airlines as a passenger and, therefore, am very familiar with the safety belt as used in planes.

While they are not a significant problem in a plane, as one has nothing else to do and has plenty of time to fumble around trying to locate both ends and get settled and adjusted, this is not true in driving and this, I believe, is a major reason for drivers' aversion to them.

For use in automobiles, my mind runs to a type of belt which would be attached to hidden reels and on being released would automatically reel out of the way and out of sight so that one would not have to sit on and slide over them trying to get in and out of a car.

Has there been any development or thought along these lines?

Yours truly,

Joe Martin, President
The Joe Martin Co., Inc.
Detroit

Retractable belts have been offered for sale in the past by various manufacturers. However, we have not noted any of this type of belt on the market in the past year or two. There is one bad feature about a retractable belt, however. Being retracted and out of sight the belt can be easily forgotten. It would almost be better if a person had to sit on the buckle and be reminded that he should fasten his belt.

BOOSTER MATERIALS

ORDERS FOR NEW POSTERS SHOWN CANNOT BE SHIPPED UNTIL AFTER JULY 1

"Driving at night is like driving in another world," "Superhighways aren't for sound barrier breakers or poking sightseers," "Mountains and some drivers don't mix."

The trio of quotes above are taken from a special grouping of TRAFFIC SAFETY fact sheets chosen for their usefulness in improving vehicle operating skill. With modern super roads spanning our nation and more cars on the road than ever before, skillful driving is vitally important to everyone.

Speed and convenience are the benefits of driving on the super roads. The fact sheet, **Driving on Superhighways** (Stock no. 329.96-13) discusses the hazards and technique.

Many motorists who spend most of their behind-the-wheel hours in the clutches of city traffic will get some valuable tips from **Rural Driving** (No. 329.96-30), a fact sheet that thoroughly explains the challenge of rural driving.

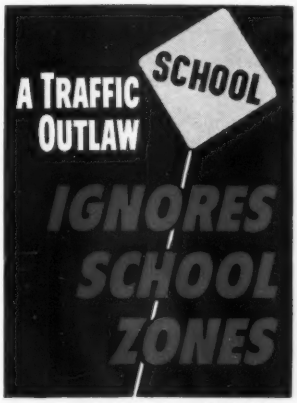
The same habits and attitudes used in daylight driving cannot be used at night. That is the main point made in **Night Driving** (No. 329.96-27), which presents the special type of driving called for after dark.

Vacationers heading for the high ground will find plenty of useful information in **Tips on Mountain Driving** (329.96-16) which details what a driver encounters in the land of downgrades, sharp curves and mountain sickness.

Although there isn't a great difference between ordinary and professional drivers, there is a measurable improvement which comes from doing a lot of little things properly at all times. Skill can be sharpened by taking **Driving Tips From the Pros** (329.96-19).

Order by stock No. and title. Min. order 50, each: 50 — $.05; 500 — $.035; 1000 — $.028; 5000 — $.025; 10,000 — $.22.

NEW TRAFFIC POSTERS FOR SEPTEMBER POSTING

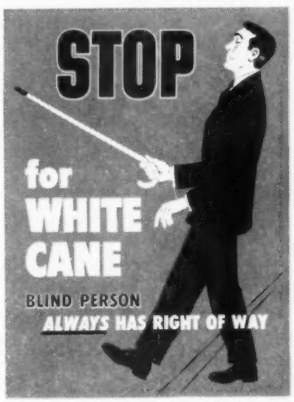


T-2143-C 25x38
T-2144-A 8½x11½

T-2145-B 17x23

ALTERNATE POSTERS FOR SEPTEMBER POSTING

(These posters may be ordered for immediate delivery)



T-1974-C 25x38
T-1975-A 8½x11½

T-1976-B 17x23

PRICES FOR ABOVE POSTERS

Traffic Posters—T-prefix to number

	1-9	10-99	100-999	1000-4999*
A Size	$0.19	$0.13	$0.077	$0.066
B Size	.35	.25	.21	.17
C Size	.44	.33	.26	.24

YOUR CREDIT LINE can be imprinted at time of the press run on Traffic B and C posters only. Orders for imprints on August posters above must be received by July 10, 1961.

Imprinting charges for these posters are $2.25 per lot plus an initial charge for each electroplate of $21.00 for C poster imprint and $12.50 for B poster imprint.

*Write for prices on quantities of 5,000 or more and for special rates on annual poster orders.

PRICES SHOWN ARE SUBJECT TO A DISCOUNT OF 10% TO NATIONAL SAFETY COUNCIL MEMBERS

FLEET POSTERS

POSTER PRICES

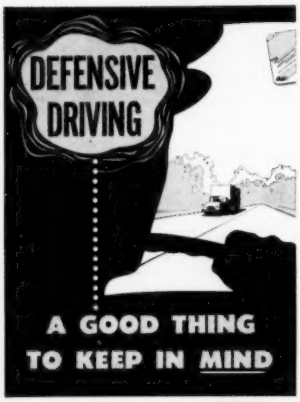
Posters illustrated on these pages are included in the automatic Motor Transportation poster services. Automatic poster sets are available on yearly subscription that provides (4) subjects per month viz. (2) "A" size (8½"x11½") and (2) "B" size (17"x23"). 281.31 Automatic service is provided in the following categories:

City Truck Intercity Truck Sales Truck Truck Terminal	City Bus Intercity Bus Taxicab Bus Terminal	Annual price 1-4 sets, $9.90; 5-49, $7.80; 50 or more, $6.44.

Posters are available for indivdual selection at the following prices:

	1-9	10-99	100-999	1000-4999*
A size	$0.19	$0.13	$0.077	$0.066
B size	.35	.25	.21	.17

All prices shown are subject to a 10% discount to National Safety Council Members. *Write for prices on quantities of 5,000 or more. See page 29 for prices of posters with T-prefix.



PRINTED IN U.S.A.
©NATIONAL SAFETY COUNCIL

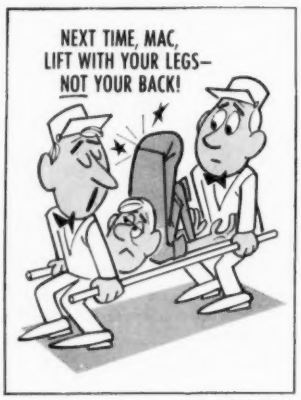
V-2138-B 17x23

PRINTED IN U.S.A.
©NATIONAL SAFETY COUNCIL

T-2114-B 17x23

PRINTED IN U.S.A.
©NATIONAL SAFETY COUNCIL

1666-A 8½x11½



PRINTED IN U.S.A.
©NATIONAL SAFETY COUNCIL

1903-A 8½x11½

PRINTED IN U.S.A.
NATIONAL SAFETY COUNCIL

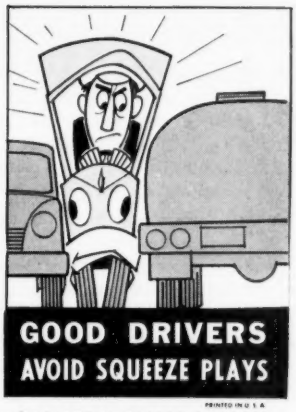
9832-A 8½x11½

PRINTED IN U.S.A.
©NATIONAL SAFETY COUNCIL

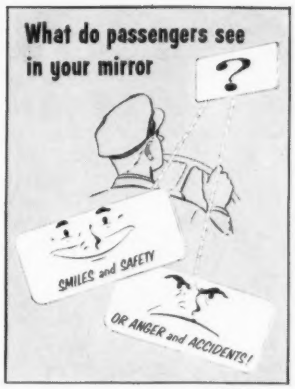
1615-A 8½x11½

PRINTED IN U.S.A.
©NATIONAL SAFETY COUNCIL

1828-B 17x23



V-2139-A 8½x11½



V-2140-B 17x23

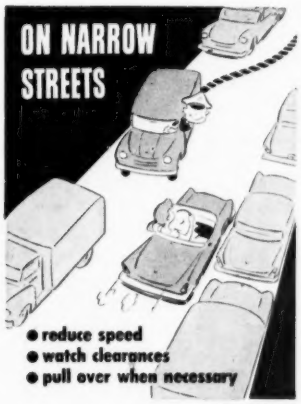
V-1594-A 8½x11½

V-0757-A 8½x11½

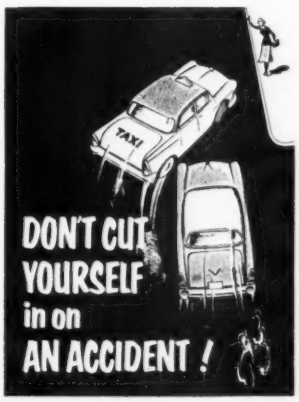
V-0224-A 8½x11½

LOW FLYING AIRCRAFT?
NO! LOW CLEARANCE!
MOVING
The driver's now in trouble
It's plain the reason why
His truck has had a scalpin
Forgot to check - poor guy!

V-0579-A 8½x11½



V-1151-A 8½x11½



V-1198-A 8½x11½

V-1140-B 17x23

YOU Can Change America's Driving Habits

by Chris Imhoff

This is the first in a series of articles written to help safety leaders interest the average motorist in the cause of better driving. The article may be reprinted in community or company publications, or it may provide ideas for use in speeches and in private conversations.

AS statisticians figure it, if Americans continue to drive as they do, one of every two persons alive today in the year 1961 will be either killed or injured in a motor vehicle accident sometime in the future.

If this appalling casualty rate is spread evenly among the population, it would mean that one out of every two members of your family, one out of every two close friends and associates, eventually will become a casualty of America's continuing war of attrition with highway hazards.

These probabilities add a sobering personal dimension to the traffic safety problem for every American and raise the question, "What, if anything, can the average person do about it?"

Edmund Burke, the famous English statesman said, "All that is necessary for the forces of evil to win in the world is for enough good men to do nothing." This is substantially what is happening in the field of traffic safety today. Too many good people, who could profoundly affect the traffic safety picture, are doing nothing. The reason they are silent and inactive is that they do not recognize their influence or how to use it.

By people of influence we do not mean civic leaders who head safety committees, write articles on driving, give safety talks or organize safety drives. Such people serve well in the higher echelons of the safety movement. The good men we are talking about operate in smaller groups and deal with relatively few individuals. But their relationship to the other members of their group is a personal and intimate one and their influence is, therefore, greater.

Harold Wilson, 44, a civil engineer, is the father of four children, two of them have just been granted driver licenses. What Harold says and does about better driving will have an effect on how carefully his wife and children use the family car. Harold and millions of other fathers can be influential in traffic safety — if they want to be. And if they know how.

Bill Davis, 17, has certain in-born personality traits that have made him a natural leader of his high school gang. What he says and does about driving an automobile will be heard,

Chris Imhoff is assistant manager of the National Safety Council's motor transport department.

seen, and copied by other members of his social group. Bill, and the hundreds of thousands of teen-age leaders like him, can be influential persons in traffic safety—if they want to be. And if they know how.

Bruce Jones, 35, is the manager of a building material supply company. His firm owns and uses five trucks. What Bruce says and does about traffic safety will affect strongly the way his employes drive company vehicles. Bruce and the thousands of small business owners or managers throughout the country can be influential people in traffic safety—if they want to be. And if they know how.

Here's the Answer

Can drivers be influenced to drive better? Yes. We do not have to spend nine million dollars in research to establish the point. We already know that they can. The basic principles of getting people to drive better are known. They were developed almost concurrently over a period of 30 years in two widely separated fields of endeavor.

The first is the driver education course in our high schools. The high school driver trainers have learned how to make student drivers two times safer than those who have not taken the training. What is their formula for success? Mainly the 90 hours of instruction on what an automobile is, how it is supposed to be used, and why.

The second laboratory of driver improvement is represented by the large commercial bus, truck, and taxicab companies who conduct safety programs for their drivers. By somewhat different methods, this group has been able to develop professional drivers who drive two times safer than drivers who do not have the benefits of such a program. What is their secret? They develop in each driver a high sense of personal responsibility for avoiding accidents. They make a game out of safe driving, they keep score, and they provide recognition for drivers with good records.

The influential traffic safety people mentioned earlier in this article can borrow ideas from both of these groups, but first they must learn something about what causes accidents and why. In doing so, they must unlearn many "facts" about driving and traffic accidents that just aren't so.

A good many harsh words have been printed and spoken about the road hog, the drunk, the speeder, and the whole rogues gallery of delinquent drivers. These revolting characters do exist, but in far smaller numbers than the public has been lead to believe. Their contribution to the traffic toll has been greatly exaggerated. Their existence has served as a smokescreen to hide the real villains of the piece. And the real villains, the people who have most of the accidents are nice guys like you and me—solid citizens who have an accident about once every seven years. We're the "bad guys" who contribute most to the 38,000 annual deaths due to traffic accidents.

And what causes traffic accidents? Is it driving while drunk? Speeding down the highway at 70 miles per hour on a rainy night, weaving from lane to lane? Such flagrant examples occasionally show up in the statistics of traffic accident causes, but the vast majority of traffic accidents are caused by little things. A little less speed, a little more alertness, a little more following distance, a little more patience and courtesy would prevent most of them.

The traffic safety picture, then, is one of the nice people slaughtering a lot of other nice people because of minor human failings behind the wheel. This is what makes the problem so difficult. If it were one of flagrant crimes on the part of a villainous minority, we could summon the needed amount of public indignation and bring the situation under control. But when it's your weaknesses and mine that constitute the biggest part of the problem, a practical solution seems hopeless. We have fought and lost too many battles with human nature to put much stock in reform.

But the situation is not hopeless. Digging back further in the chain of cause and effect we are able to discern one major cause which, if eradicated, would automatically correct most of the human weaknesses that cause accidents. This one major cause is susceptible to treatment. It is embodied in the fact that *Americans have never taken driving seriously enough.* We have quite universally underestimated the amount of knowledge, skill and technique involved in really good driving. And we have brashly overestimated our own skill as drivers.

Franklin M. Kreml, director of the Transportation Center at Northwestern University has said, "The automobile has become so necessary to our daily living that driving skill is as important to the individual as a command of the English language."

How many of us would put driving skill on the same level of importance as a command of the English language? At first it sounds absurd. To say that riding a bicycle well is as important as speaking good English would not jar our senses more. Yet, here is a man who has spent most of his adult life in the study of traffic problems and to him driving skill is *that* important. He knows whereof he speaks. Our sense of surprise at such a statement is a measure of how much we have underestimated the importance of good driving.

Kreml goes on to say "moreover, today's increasingly complex traffic situations demand that driving ability be acquired through planned training instead of being picked up casually and haphazardly." Is there really so much to learn about driving an automobile? Most of us remember the day we "learned how to drive." Everything after that was just practice. Who needs planned training?

Proof of the Pudding

Listen to the comments of drivers who learned to drive by the haphazard method and then, after years of "practice," found their way back to the Little Red School House where they took a course in adult driver education. The almost universal comment of graduates goes something like this—"I never realized there was so much involved in driving an automobile," or "I think everyone ought to take a course like this."

And how far have we over-estimated our powers as master drivers? A survey conducted by Opinion Research Corporation revealed that nine out of ten drivers think they are better than the next driver on the road. How's that for smugness?

To the good men everywhere who would now ask the question, "What can I do to influence the traffic safety picture for the better?" we can suggest these things:

1. *Recognize that you have a role*

to play. There are people in your life to whom you are an important person and who respect and are influenced by what you stand for. To a large extent they copy what you do, at least attach importance to your views. It is these half-dozen or more persons—your wife, your sons and daughters, your neighbors, your friends, your employes—who make you an influential person in traffic safety. By what you say and do on the subject of traffic safety you can influence the way they will behave behind the wheel of a motor vehicle. Recognize the fact that because of this influence you have a great responsibility to stand for and reflect the positive aspects of traffic safety.

2. *Consciously exercise that role.* Recognize that if you are going to influence driving attitudes, you must consciously exercise your role as an influential person. Don't make it a hit or miss proposition. The image you present must be of a person who is more than casually interested in better driving and who is, in fact, positively and constructively concerned about promoting better driving.

3. *Speak up for traffic safety.* Traffic safety is so much a part of our daily lives that it is a frequent subject of conversation. When the subject comes up, speak up and express the positive factual ideas and attitudes concerning the subject. Correct misconceptions. Show by the manner in which you discuss the problem that you regard traffic safety as a serious matter deserving of the informed support and cooperation of every citizen.

Your objective is not to overwhelm the other person with information, but to nudge his attitudes and move them just a little bit in the right direction. Your strategy must be one of indirection. Influence, after all, is defined as, "the power or process of producing an effect upon a person by imperceptible or intangible means." Keep your manner conversational. The moment you start to lecture, your listener will begin to tune out and any influence you might have had will be lost. Speak up for traffic safety—but don't be a bore.

4. *Know your field.* If your influence is to be effective, it must be based on facts. There is already too little information and too much mis-information about traffic safety in circulation today. One of your first tasks, then, is to educate yourself.

A basic source of facts about driving can be found in the driver's handbook issued by your state driver licensing bureau. The odds are that at least 40 per cent of the information it contains will be new to you—things you should have learned long ago, little-known-facts you can use in influencing others.

As your interest in the field grows, you may want to pursue your studies further. Your local library is sure to have several books on the subject of driving. If you have a local safety council, this, too will provide valuable guidance.

5. *Be a good driver yourself.* Your example as a driver speaks louder about your attitude toward traffic safety than anything you can say. Consciously seek to learn and put into practice the principles of good driving. Learn the fine points of each of the basic driving maneuvers. In driving, perform each of these the right way every time.

If there is an adult driver education course in your community, the time and money spent in attending such a course will be more than repaid in terms of better driving for yourself and more effective influence on the driving of those in your group.

Learn and practice the principles of Defensive Driving. To many an amateur, driving is a kind of tag game, the object of which is to be legally right if caught in an accident. Obeying traffic rules and regulations is, of course, basic in good driving. But professional drivers don't stop there. They have learned that you can be legally right and still be killed or injured in a traffic accident. The Defensive Driver drives so as to prevent accidents regardless of the illegal or faulty driving of the other driver or the adverse weather or road conditions present.

The concept of Defensive Driving is elaborated in two booklets published by the National Safety Council—"The Professional Code for Defensive Driving," and "Be Your Own Traffic Judge." These were designed for professional drivers, but the private motorist can learn and apply these same principles and greatly increase his ability to avoid accidents.

6. *Support other traffic safety efforts.* As you become more and more

To Page 47

Walter D. Weiss Joins NSC Staff

Walter D. Weiss has joined the staff of the National Safety Council's motor transport department.

A native of Saginaw, Mich., Weiss was formerly assistant director of the Genesee Co. (Mich.) Traffic Safety Commission. While serving in this capacity, he wrote and helped coordinate "Teen Traffic Court," a television documentary dealing with true cases of teen-age traffic violators. The program was shown weekly on WJRT-TV, Flint, Mich.

Weiss holds a bachelor of arts degree in highway traffic administration from Michigan State University. He is currently preparing a thesis for a master's degree in the same field from Michigan State.

Machlin E. Sternburgh

Machlin E. Sternburgh, safety director, New York City Transit Authority, and a member of the Transit Section Executive Committee since 1947, died in New York on April 18, 1961, after a brief illness.

Widely known in the transit industry as an exponent of greater attention to the prevention of employe injuries in transit operations, Mr. Sternburgh was also a recognized authority in the organization of accident prevention work in large companies.

During his period of service with the Transit Section Executive Committee he served as chairman of the rapid transit sub-committee for three years and was currently membership chairman.

They Out-Think Disaster—

LP gas truckers must be top performers

by W. D. Cook

WE AT Suburban Propane Gas Corp. realize that making LP gas deliveries is more than "driving." It is equal to, if not greater in importance than, any other service job. It takes an intelligent, mentally stable and experienced man to handle a delivery truck properly.

We select our delivery drivers from our older and more experienced employes—men who have had experience making installations, know the properties of LP gas, know how to handle it to make safe installations, and know the size and capacity of all types of containers.

All of these things can best be learned by experience. Delivery men should have station experience so that they know how to fill their truck tanks properly. And they should be physically fit.

A man who measures up to these standards with only a short period of instruction on the tank itself, can handle it safely. He will also know how to handle emergencies because of his familiarity with the truck, the product, and the customer installation.

We insist that our drivers observe the rules shown on this page. Maybe you can use them in your operation.

However, our safety rules do not end with driver training. The design of the vehicle is just as important.

All of our trucks, although used locally, are built to conform with ICC requirements. In addition, we consider some other points equally important.

For instance, we do not want streamlined trucks, or ones with false

Turn Page

W. D. Cook is vice president and controller of Suburban Propane Gas Corp. This article is reprinted from *Commercial Car Journal*, March 1961 (copyright Chilton Co.)

FOR SAFE LP GAS DELIVERIES

1 Chock **2 Inspect** **3 Report**

Use a chock block
every time you park the truck—for delivery and every other purpose.

Watch the truck
wherever you are working. With the bypass working properly, the pump operates regardless of whether liquid is going into the customer's tank or not. This enables the driver to open and close valves on his delivery hose and at the customer's tank when he wishes. Then, even though the truck is out of sight, the driver generally knows that everything is OK. However, if the driver can see the truck at all times, he can prevent anyone from tampering with it.

Inspect hoses
and other equipment daily. Report immediately if they are not in good condition. Since delivery hose is in constant use, it's easy to keep tab on it. But hoses used in suction or discharge piping, to provide flexibility, are not always so obvious.

Concentrate
on the job at all times. No time here for daydreaming.

Height problems
can turn into accidents if the driver forgets the size of his trailer and rips down grape arbors, electric or telephone wires. He must also be careful of overhanging parts of customer's house.

Know overfill remedies
so well that when overfilling occurs (It should be infrequently) there's no doubt about what to do.

Walk around
the truck after giving the customer service. It's a sure way to check hoses that have not been disconnected—or children who have begun to play under the truck since it drove up.

Don't talk to customer
until you finish making the delivery and hose is disconnected. When you're filling an LP tank you have no time for distractions, so it is entirely proper to say politely, "I'll be with you in just a moment."

Special precautions
are necessary when delivering near schools and places where the public gathers. And delivery trucks should not be parked in groups along public highway or at diners.

Release of gas
calls for quick thinking — know what to do to minimize the chance for ignition and injury.

Report hazards
found on the truck or at the customer's installation. On the first delivery to a customer, a thorough check of the premises should turn up any hazards. Later checks will show if conditions remain the same.

work. The oldtimer of 1930, while it is out of date, did have certain safety and efficiency advantages which are equally valuable today. It had a simple container mounted on a chassis with the piping, regulator and pump both accessible and in plain view. Of course piping, pump, meter and tank fittings should be amply protected against collision, road damage and mischievous tampering—but they should otherwise be accessible. So called "streamlining" has been known to hide fires and make them difficult to handle. It makes leaks less obvious and more difficult to locate. If a component is not necessary to protect the container and fittings against collision damage and road dirt, it merely adds weight and cuts efficiency.

We insist that tank outlets be kept to a minimum number, and that they be properly located. Many of our trucks have only one outlet in the underside of the tank—the liquid outlet. All but a few of our tank trucks have manheads, so the other outlets are in the manhead cover.

Some of our trucks still have liquid outlets in the rear, with a liquid eduction pipe. We protect them adequately against collision and overturn damage. The rear relief valve mounting is an outgrowth of the early 1930 truck tank and it has proved an acceptable location. But it should be well protected against physical damage and corrosion from rain and condensation. Loose fitting rain caps, easily kept in place under normal conditions, are essential.

The container must be so well secured to the chassis that it cannot become detached under collision conditions. (Our present method has survived unintentional field tests—in fact, in most cases the container has held the chassis together.)

All tank openings, except the relief valve, are equipped with either an excess flow valve, back flow check valve, or a 54 orifice. All main liquid and vapor lines also have a manual shut-off located as close to the container as practical.

Each truck carries two fire extinguishers. One is placed on each side to increase the chance of having one

To Page 47

"Pro" Techniques For Vacation Drivers

From Page 10

the foot on the accelerator, *not on the brake.*

5. Driving on Wet roads.

The tremendous increase in traffic in summer is presenting a new skidding problem and hazard. Thousands of cars and trucks speeding over major and super highways and parkways are depositing oily carbon at an estimated rate of 1,000 gallons per mile per year.

It takes about a week to 10 days of dry weather to acquire a dangerous deposit of dirt, dust and this oily film. Then a wet, foggy night or a first sprinkle of rain supplies the necessary moisture to make this slick-covered highway actually as slippery as snow. It is this condition which catches the unsuspecting driver in one of those terrific multiple car accidents.

Remember, roads are likely to be most slippery at the beginning of a rain, because a heavy downpour washes away some of the oily dust and then the road becomes safer. The good driver knows this and drives accordingly.

6. Driving off pavement edge onto shoulders.

The edge of the road pavement sometimes causes very serious accidents. A ridge between the road pavement and the road shoulder easily throws the car into a skid. We should try to keep all of the wheels of the car on the paved surface.

If the right wheels do get off the paved surface, there is a correct technique for getting them back on. Don't try to get back on the pavement at high speed. Avoid getting panicky. Never slam on the brakes. Drive straight ahead, with the right wheels off the pavement, and slow your car down gradually. Drive at a *slow speed* with the right wheels about two feet, if possible, out on the shoulder. Check the roadway behind and then cut back onto the pavement by turning the front wheels sharply to the left. If you jerk back at high speed, or attempt to get back while driving nearly parallel to the pavement edge, you can ruin tires, or throw the car into a dangerous skid, or cause it to roll over.

There are many, many more driving situations that get drivers into trouble. I think that each one should be carefully studied and the sound driving practice to use should be presented and discussed with our drivers.

If all drivers would use sound driving practices, we could be reasonably sure of fewer violations and accidents, because the amateur driver would then be in the class of the champions.

THIS LITTLE PIG GOES LECTURING

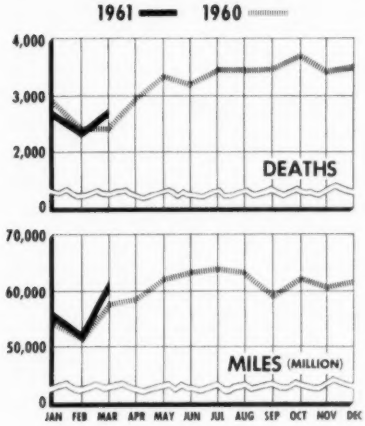
Trooper Robert Bynum, Jr. of the Oklahoma Highway Patrol demonstrates his talking, driving road hog —a character he built to dramatize traffic safety presentations. Both car and driver are operated by a push button system powered by batteries. Bynum has offered to help any state or municipal safety department in building a similar figure for use in safety work. His address is 1310 McFarland Drive, Claremore, Okla.

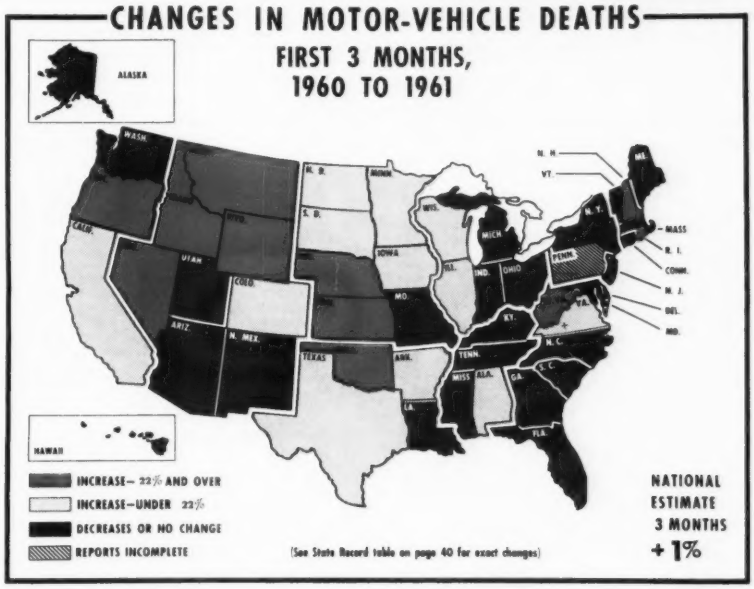
From Page 6

deaths per 10,000 registered vehicles were:

	Reg. Rate	*Pop. Rate*
Group I (Over 1,000,000 Pop.)		
Detroit, Mich.	2.4	9.1
Chicago, Ill.	2.5	7.1
Los Angeles, Calif.	2.9	15.2
Group II (750,000 to 1,000,000 Pop.)		
Washington, D. C.	0.7	2.6
Cleveland, Ohio	1.8	5.9
Baltimore, Md.	1.8	6.4
Group III (500,000 to 750,000 Pop.)		
Buffalo, N. Y.	1.2	5.3
San Antonio, Tex.	1.2	4.8
Cincinnati, Ohio	2.0	8.8
Group IV (350,000 to 500,000 Pop.)		
Kansas City, Mo.	1.1	3.4
Memphis, Tenn.	1.7	6.4
Fort Worth, Tex.	1.9	10.1
Group V (200,000 to 350,000 Pop.)		
Richmond, Va.	0.4	1.8
Wichita, Kan.	0.6	3.1
Des Moines, Iowa	0.8	3.8
Group VI (100,000 to 200,000 Pop.)		
Rockford, Ill.	0.0	0.0
South Bend, Ind.	0.0	0.0
Evansville, Ind.	0.0	0.0
Group VII (50,000 to 100,000 Pop.)		
Raleigh, N. C.	0.0	0.0
Santa Monica, Calif.	0.0	0.0
Springfield, Ill.	0.0	0.0
Group VIII (25,000 to 50,000 Pop.)		
Redwood City, Calif.	0.0	0.0
Cheyenne, Wyo.	0.0	0.0
Anderson, Ind.	0.0	0.0
Group IX (10,000 to 25,000 Pop.)		
Medford, Ore.	0.0	0.0
Ponca City, Okla.	0.0	0.0
Lodi, Calif.	0.0	0.0

MONTHLY MOTOR VEHICLE DEATHS AND TRAFFIC TRENDS





MOTOR VEHICLE DEATHS AND CHANGES

Months	DEATHS				PERCENTAGE CHANGES				
					Corresponding Months			4 Mos. Mov. Ave.*	
	1956	1959	1960	1961	1956-1961	1959-1960	1960-1961	1959-1960	1960-1961
January	2,954	2,824	2,890	2,660	—10%		— 8%		— 2%
February	2,652	2,401	2,380	2,330	—13%		— 2%		— 5%
March	2,940	2,879	2,400	2,740	— 7%		+14%		— 1%
3 Months	8,546	8,104	7,670	7,730	—10%		+ 1%		
April	2,970	2,680	2,960			+10%		— 1%	
May	3,094	3,199	3,330			+ 4%		— 1%	
June	3,338	3,138	3,210			+ 2%		0%	
July	3,555	3,286	3,450			+ 5%		+ 5%	
August	3,535	3,502	3,470			— 1%		+ 3%	
September	3,653	3,381	3,490			+ 3%		+ 2%	
October	3,476	3,386	3,690			+ 9%		+ 4%	
November	3,603	3,527	3,430			— 3%		+ 2%	
December	3,858	3,707	3,500			— 6%		+ 1%	
Total	39,628	37,910	38,200						

All 1956 and 1959 figures are from the National Office of Vital Statistics. The 1960 and 1961 figures are National Safety Council estimates.

The 1961 national estimate is arrived at by assuming that the percentage change from 1960 to 1961 in the states reporting for both years reflects the 1960-1961 change in the entire country. First reports are preliminary, so revisions are made from time to time as later reports are received for the various months. Thus, figures above for 1961 may differ slightly from figures for the same months which will be published in future issues of TRAFFIC SAFETY.

*Four Months Moving Average is based on changes between the totals for four months instead of one month. For example, the March figure shows the change between the totals for December-March 1960 and December-March 1961, etc. Adding several months together tends to smooth out single month changes which may be affected by differences in the number of weekends in a month from one year to the next, random variations, etc.

TRAFFIC DEATHS—CITY RECORDS

The table covers only motor-vehicle deaths resulting from traffic accidents that occurred in the city. Nontraffic motor vehicle deaths (where the accident occurred on home or work premises) are not included; nor are deaths in the city from accidents occurring outside.

Rankings are based on the 1961 registration death rate which is the number of deaths per 10,000 registered motor vehicles on an annual basis. Vehicle registration figures are for the year 1960 and were supplied by R. L. Polk & Co.

Cities are ranked by registration death rates—from low to high. When two or more cities have exactly the same rate, ranking is by total vehicle registrations—from large to small.

Cities shown in heavy type have improved in 1961 compared with 1960.

The population death rate is the number of deaths per 100,000 population on an annual basis. Populations are as of April, 1960, or later censuses taken by the U. S. Bureau of the Census.

	Three Months 1961	1960	1959	1961 Reg. Rate	1961 Pop. Rate
ALL REPORTING CITIES				2.0	8.2
Group I (1,000,000 and over)					
1. Detroit, Mich.	38	52	35	2.4	9.1
2. Chicago, Ill.	63	45	58	2.5	7.1
All cities in this group				2.8	7.9
3. Los Angeles, Calif.	94	115	81	2.9	15.2
4. New York, N. Y.	109	140	196	3.0	5.6
5. Philadelphia, Pa.	40	40	36	3.1	8.0
Group II (750,000 to 1,000,000)					
1. Washington, D. C.	5	19	16	0.7	2.6
2. Cleveland, Ohio	13	29	26	1.8	5.9
3. Baltimore, Md.	15	34	26	1.8	6.4
All cities in this group				2.1	8.0
4. Houston, Tex.	23	19	31	2.2	9.8
5. St. Louis, Mo.	29	14	26	4.0	15.5
Group III (500,000 to 750,000)					
1. Buffalo, N. Y.	7	9	15	1.2	5.3
2. San Antonio, Tex.	7	22	11	1.2	4.8
3. Cincinnati, Ohio	11	17	13	2.0	8.8
4. Dallas, Tex.	16	23	13	2.0	9.4
5. Pittsburgh, Pa.	11	15	15	2.2	7.3
6. Milwaukee, Wis.	15	11	13	2.3	8.1
All cities in this group				2.3	9.3
7. Seattle, Wash.	20	14	13	2.7	14.4
8. San Francisco, Calif.	23	29	25	3.1	12.4
9. San Diego, Calif.	19	16	23	3.4	13.3
Group IV (350,000 to 500,000)					
1. Kansas City, Mo.	4	21	11	1.1	3.4
2. Memphis, Tenn.	8	9	7	1.7	6.4
3. Fort Worth, Tex.	9	8	11	1.9	10.1
4. Atlanta, Ga.	10	10	18	2.0	8.2
5. Portland, Ore.	12	12	16	2.0	12.9
6. Louisville, Ky.	10	11	14	2.3	10.2
All cities in this group				2.4	10.6
7. Indianapolis, Ind.	14	14	8	2.5	11.8
8. Oakland, Calif.	11	13	15	2.6	12.0
9. Columbus, Ohio	13	6	12	2.6	11.0
10. Phoenix, Ariz.	13	15	12	2.6	11.8
11. Denver, Colo.	16	11	12	2.7	13.0
12. Birmingham, Ala.	12	7	13	3.0	14.1
13. Minneapolis, Minn.	18	13	10	3.4	14.9
Group V (200,000 to 350,000)					
1. Richmond, Va.	1	9	5	0.4	1.8
2. Wichita, Kan.	2	2	2	0.6	3.1
3. Des Moines, Iowa	2	4	3	0.8	3.8
4. Charlotte, N. C.	2	12	7	0.8	4.0
5. Providence, R. I.	2	3	3	0.8	3.9
6. Albuquerque, N. M.	2	4	7	0.9	4.0
7. Omaha, Neb.	3	3	7	1.0	4.0
8. St. Paul, Minn.	4	8	5	1.1	5.1
9. Akron, Ohio	4	9	9	1.2	5.5
10. Dayton, Ohio	5	6	4	1.4	7.6
11. Syracuse, N. Y.	3	5	1	1.4	5.6
12. Oklahoma City, Okla.	9	10	7	1.9	11.1
All cities in this group				1.9	9.3
13. San Jose, Calif.	6	8	10	2.0	11.8
14. Toledo, Ohio	8	2	2	2.0	10.1
15. Tucson, Ariz.	6	5	6	2.2	11.3
16. Tampa, Fla.	9	11	6	2.5	13.1
17. Long Beach, Calif.	10	19	8	2.5	11.6
18. Jacksonville, Fla.	8	8	6	2.5	15.9
19. Rochester, N. Y.	9	6	3	2.5	11.3
20. Miami, Fla.	12	3	17	2.6	16.5
21. Norfolk, Va.	9	6	1	2.9	8.8
22. Mobile, Ala.	8	8	10	4.5	15.8
23. El Paso, Tex.	15	3	16	6.6	21.7
Group VI (100,000 to 200,000)					
1. Rockford, Ill.	0	0	2	0.0	0.0
2. South Bend, Ind.	0	3	1	0.0	0.0
3. Evansville, Ind.	0	4	6	0.0	0.0
4. Trenton, N. J.	0	0	3	0.0	0.0
5. Madison, Wis.	0	1	0	0.0	0.0
6. Topeka, Kan.	0	0	3	0.0	0.0
7. Bridgeport, Conn.	0	5	2	0.0	0.0
8. Allentown, Pa.	0	3	1	0.0	0.0
9. Waterbury, Conn.	0	2	1	0.0	0.0
10. Niagara Falls, N. Y.	0	0	1	0.0	0.0
11. Cambridge, Mass.	0	0	0	0.0	0.0
12. Erie, Pa.	1	2	0	0.6	2.9
13. Lansing, Mich.	1	2	1	0.6	3.5
14. Amarillo, Tex.	1	4	3	0.7	2.9
15. Salt Lake City, Utah	2	10	5	0.7	4.2
16. Worcester, Mass.	1	3	4	0.7	2.1
17. Glendale, Calif.	1	4	3	0.7	3.4
18. Montgomery, Ala.	1	2	1	0.7	3.0
19. Santa Ana, Calif.	1	0	3	0.7	4.0
20. Yonkers, N. Y.	1	1	0	0.7	2.1
21. Lincoln, Neb.	1	0	0	0.7	3.1
22. Knoxville, Tenn.	1	4	3	0.7	3.6
23. Grand Rapids, Mich.	3	0	6	1.1	6.1
24. Flint, Mich.	3	4	1	1.1	6.1
25. Pasadena, Calif.	2	4	5	1.2	6.9
26. Jackson, Miss.	2	3	6	1.3	5.5
27. Chattanooga, Tenn.	2	2	4	1.3	6.2
28. Little Rock, Ark.	2	3	1	1.4	7.4
29. Winston-Salem, N. C.	2	1	2	1.4	7.2
30. Berkeley, Calif.	2	2	3	1.5	7.2
31. Austin, Tex.	3	2	6	1.6	6.4
32. Hartford, Conn.	3	0	0	1.6	7.4
33. Spokane, Wash.	4	3	2	1.6	8.8
34. Baton Rouge, La.	3	4	5	1.6	7.9
All cities in this group				1.8	8.5
35. Canton, Ohio	3	1	0	1.9	10.6
36. New Haven, Conn.	3	1	3	2.1	7.9
37. Anaheim, Calif.	3	5	7	2.2	11.5
38. Utica, N. Y.	2	0	0	2.2	8.0
39. Arlington, Va.	4	1	3	2.5	9.8
40. Sacramento, Calif.	8	10	4	2.5	16.7
41. St. Petersburg, Fla.	7	14	11	2.5	15.4
42. Dearborn, Mich.	4	5	4	2.6	14.3
43. Fresno, Calif.	6	3	5	2.7	17.9
44. Peoria, Ill.	4	2	0	2.8	15.5
45. Corpus Christi, Tex.	5	7	2	2.9	11.9
46. Gary, Ind.	5	3	3	2.9	11.2
47. Youngstown, Ohio	6	4	2	2.9	14.4
48. Greensboro, N. C.	4	4	3	2.9	13.4
49. Shreveport, La.	6	5	3	3.0	14.6
50. Columbus, Ga.	4	0	2	3.2	13.7
51. Lubbock, Tex.	5	3	5	3.4	15.5
52. Kansas City, Kan.	6	4	5	3.4	19.7
53. Savannah, Ga.	5	4	1	3.4	13.4
54. Newport News, Va.	3	3	1	3.7	10.6
55. Torrance, Calif.	5	0	5	3.8	19.8
56. Fort Wayne, Ind.	8	4	5	3.8	19.8
57. Nashville, Tenn.	8	7	3	3.9	18.7
58. Hammond, Ind.	4	2	7	4.2	14.3
59. Beaumont, Tex.	6	1	5	4.7	20.1
60. Portsmouth, Va.	4	1	2	4.7	13.9
61. Duluth, Minn.	6	2	2	5.1	22.5
Group VII (50,000 to 100,000)					
1. Raleigh, N. C.	0	2	0	0.0	0.0
2. Santa Monica, Calif.	0	1	1	0.0	0.0
3. Springfield, Ill.	0	2	1	0.0	0.0
4. Alexandria, Va.	0	0	2	0.0	0.0
5. Cedar Rapids, Iowa	0	0	0	0.0	0.0
6. Odessa, Tex.	0	1	2	0.0	0.0
7. Racine, Wis.	0	2	0	0.0	0.0
8. Binghamton, N. Y.	0	1	1	0.0	0.0
9. Muncie, Ind.	0	2	0	0.0	0.0
10. Davenport, Iowa	0	2	2	0.0	0.0
11. Sioux City, Iowa	0	0	8	0.0	0.0
12. Eugene, Ore.	0	1	2	0.0	0.0
13. Kenosha, Wis.	0	1	4	0.0	0.0
14. Bethlehem, Pa.	0	0	0	0.0	0.0
15. Aurora, Ill.	0	1	0	0.0	0.0
16. Asheville, N. C.	0	0	0	0.0	0.0
17. St. Clair Shores, Mich.	0	0	0	0.0	0.0
18. Lorain, Ohio	0	0	1	0.0	0.0
19. Mount Vernon, N. Y.	0	1	3	0.0	0.0
20. Ann Arbor, Mich.	0	2	0	0.0	0.0
21. Evanston, Ill.	0	0	0	0.0	0.0
22. Manchester, N. H.	0	2	3	0.0	0.0
23. Pawtucket, R. I.	0	0	1	0.0	0.0
24. San Angelo, Tex.	0	1	3	0.0	0.0
25. Johnstown, Pa.	0	1	1	0.0	0.0
26. New Britain, Conn.	0	2	0	0.0	0.0
27. Hampton, Va.	0	0	3	0.0	0.0
28. Covington, Ky.	0	1	1	0.0	0.0
29. Santa Clara, Calif.	0	2	2	0.0	0.0
30. Oak Park, Ill.	0	1	0	0.0	0.0
31. Warwick, R. I.	0	1	4	0.0	0.0
32. Lynchburg, Va.	0	2	1	0.0	0.0
33. Wauwatosa, Wis.	0	3	0	0.0	0.0
34. Irvington, N. J.	0	2	0	0.0	0.0
35. West Covina, Calif.	0	1	0	0.0	0.0
36. Tuscaloosa, Ala.	0	2	2	0.0	0.0
37. Lwr. Merion Twp., Pa.	0	1	1	0.0	0.0
38. Dubuque, Iowa	0	2	0	0.0	0.0
39. Rock Island, Ill.	0	0	0	0.0	0.0
40. Euclid, Ohio	0	0	0	0.0	0.0
41. Pittsfield, Mass.	0	1	1	0.0	0.0
42. Bayonne, N. J.	0	2	1	0.0	0.0
43. Bloomfield, N. J.	0	0	0	0.0	0.0
44. University City, Mo.	0	0	0	0.0	0.0
45. West Allis, Wis.	0	0	1	0.0	0.0
46. Waltham, Mass.	0	1	0	0.0	0.0
47. West Hartford, Conn.	0	0	1	0.0	0.0
48. Roseville, Mich.	0	1	2	0.0	0.0
49. Meriden, Conn.	0	1	3	0.0	0.0
50. Kettering, Ohio	0	2	0	0.0	0.0
51. Hayward, Calif.	1	2	3	0.8	5.5
52. Pueblo, Colo.	1	1	7	0.9	4.4
53. Decatur, Ill.	1	1	1	0.9	5.1
54. Springfield, Ohio	1	0	4	1.0	4.8
55. Royal Oak, Mich.	1	3	2	1.0	5.0
56. Ogden, Utah	1	6	1	1.0	5.7
57. Abilene, Tex.	1	2	3	1.0	4.4
58. Warren, Mich.	1	5	4	1.1	4.5
59. San Leandro, Calif.	1	1	1	1.1	6.1
60. Joliet, Ill.	1	0	0	1.1	6.0
61. Waterloo, Iowa	1	2	0	1.1	5.6
62. Augusta, Ga.	1	4	1	1.1	5.7
63. Palo Alto, Calif.	1	1	3	1.1	7.6
64. Wilkes-Barre, Pa.	1	2	1	1.2	6.3
65. Sioux Falls, S. D.	1	2	3	1.3	6.1
66. Midland, Tex.	1	0	0	1.3	6.4
67. Lake Charles, La.	1	0	1	1.3	6.3
68. New Rochelle, N. Y.	1	1	1	1.4	5.2
69. Orlando, Fla.	2	2	1	1.4	9.1
70. Portland, Maine	1	1	1	1.4	5.5
71. East Orange, N. J.	1	1	0	1.5	5.2
72. Wilmington, Del.	2	1	0	1.5	8.4
73. Fullerton, Calif.	1	1	0	1.5	7.1
74. Columbia, S. C.	2	3	1	1.6	8.2
75. Burbank, Calif.	2	3	4	1.6	8.9
76. Pasadena, Tex.	1	0	0	1.7	6.8
77. Reading, Pa.	2	2	2	1.7	8.1
All cities in this group				1.7	7.8
78. Las Vegas, Nev.	2	1	1	1.8	12.4
79. Compton, Calif.	2	4	5	1.8	11.1
80. East St. Louis, Ill.	2	2	0	1.8	9.8
81. Schenectady, N. Y.	2	0	0	1.8	9.8
82. Wheeling, W. Va.	1	0	0	1.8	7.5
83. Charleston, S. C.	1	3	0	2.0	6.1
84. Lincoln Park, Mich.	1	2	1	2.0	7.4
85. Hamilton, Ohio	2	0	2	2.0	11.0
86. Santa Barbara, Calif.	2	3	1	2.0	13.6
87. Norwalk, Conn.	1	2	2	2.0	5.9
88. Newton, Mass.	2	2	3	2.1	8.7
89. Stockton, Calif.	3	3	8	2.1	13.9
90. Durham, N. C.	2	2	3	2.1	10.2
91. Saginaw, Mich.	3	1	0	2.2	12.2
92. Reno, Nev.	2	0	0	2.2	15.5
93. Pensacola, Fla.	2	2	2	2.2	14.1
94. Rome, N. Y.	1	1	0	2.2	7.8
95. Arlington, Mass.	1	1	1	2.2	8.0
96. Fort Lauderdale, Fla.	3	1	1	2.2	14.4
97. Passaic, N. J.	1	0	2	2.3	7.4
98. Greenville, S. C.	2	1	0	2.3	12.1
99. Stamford, Conn.	2	4	0	2.4	8.6
100. Billings, Mont.	2	1	0	2.4	15.1
101. Lexington, Ky.	2	0	2	2.4	12.7
102. Waco, Tex.	3	6	2	2.5	12.3

	Three Months 1961	1960	1959	1961 Reg. Rate	1961 Pop. Rate
103. St. Joseph, Mo.	2	1	0	2.5	10.0
104. Independence, Mo.	2	1	5	2.6	12.8
105. Bloomington, Minn.	**1**	**5**	**0**	**2.6**	**7.9**
106. Lancaster, Pa.	2	2	2	2.6	13.1
107. Greenwich, Conn.	1	0	2	2.6	7.4
108. Atlantic City, N. J.	**1**	**2**	**1**	**2.6**	**6.7**
109. Springfield, Mo.	**3**	**4**	**1**	**2.6**	**12.5**
110. Kalamazoo, Mich.	3	1	0	2.6	14.6
111. Miami Beach, Fla.	2	2	4	2.6	12.7
112. Roanoke, Va.	3	1	0	2.7	12.4
113. Bay City, Mich.	2	1	1	2.7	14.9
114. Charleston, W. Va.	2	1	1	2.7	9.3
115. Vallejo, Calif.	2	2	2	2.7	13.1
116. Gadsden, Ala.	2	2	1	2.8	13.8
117. High Point, N. C.	2	1	0	2.8	12.9
118. Jackson, Mich.	2	0	1	2.8	15.8
119. Lakewood, Calif.	2	1	1	2.9	11.9
120. White Plains, N. Y.	2	0	0	2.9	15.8
121. Livonia, Mich.	**2**	**6**	**0**	**3.0**	**12.0**
122. Terre Haute, Ind.	3	2	0	3.3	16.6
123. Brockton, Mass.	**2**	**3**	**1**	**3.3**	**11.0**
124. Colorado Spgs., Colo.	4	0	1	3.3	22.8
125. Council Bluffs, Iowa	2	0	2	3.3	14.7
126. San Bernardino, Calif.	5	3	5	3.3	21.8
127. Riverside, Calif.	4	2	2	3.3	19.0
128. Pontiac, Mich.	4	0	0	3.5	19.5
129. Warren, Ohio	3	1	3	3.6	20.1
130. Richmond, Calif.	3	0	1	3.7	16.7
131. Parma, Ohio	2	2	0	3.7	9.7
132. Lawton, Okla.	2	0	1	3.8	13.0
133. Medford, Mass.	2	0	0	3.9	12.3
134. Tyler, Tex.	3	0	2	3.9	23.4
135. Great Falls, Mont.	3	1	0	4.3	21.7
136. Chicopee, Mass.	2	0	2	4.6	13.0
137. Waukegan, Ill.	3	0	0	4.7	21.5
138. San Mateo, Calif.	4	0	0	4.8	22.9
139. Lakewood, Ohio	3	2	0	4.9	18.1
140. Fort Smith, Ark.	3	1	3	5.0	22.6
141. Port Arthur, Tex.	4	1	3	5.4	24.0
142. East Chicago, Ind.	**3**	**4**	**0**	**6.9**	**20.8**
143. Brookline, Mass.	3	2	1	6.9	22.2
144. Alameda, Calif.	4	0	1	7.6	26.1
145. Pomona, Calif.	8	1	2	9.6	47.6

Group VIII (25,000 to 50,000)

1. Redwood City, Calif.	**0**	**1**	**0**	**0.0**	**0.0**
2. Cheyenne, Wyo.	0	0	0	0.0	0.0
3. Anderson, Ind.	0	0	1	0.0	0.0
4. Mansfield, Ohio	0	0	0	0.0	0.0
5. Boise, Idaho	**0**	**2**	**0**	**0.0**	**0.0**
6. Everett, Wash.	0	0	1	0.0	0.0
7. Lafayette, Ind.	0	0	1	0.0	0.0
8. Battle Creek, Mich.	0	0	1	0.0	0.0
9. Elgin, Ill.	**0**	**1**	**2**	**0.0**	**0.0**
10. Plainfield, N. J.	0	0	0	0.0	0.0
11. Newark, Ohio	0	0	0	0.0	0.0
12. Whittier, Calif.	0	0	0	0.0	0.0
13. Hollywood, Fla.	**0**	**2**	**1**	**0.0**	**0.0**
14. Appleton, Wis.	0	0	3	0.0	0.0
15. Englewood, Colo.	0	0	0	0.0	0.0
16. Bellflower, Calif.	**0**	**2**	**2**	**0.0**	**0.0**
17. Salina, Kan.	0	0	0	0.0	0.0
18. Oxnard, Calif.	**0**	**1**	**1**	**0.0**	**0.0**
19. Owensboro, Ky.	**0**	**1**	**0**	**0.0**	**0.0**
20. Middletown, Ohio	**0**	**1**	**1**	**0.0**	**0.0**
21. Daytona Beach, Fla.	**0**	**2**	**1**	**0.0**	**0.0**
22. Quincy, Ill.	0	0	3	0.0	0.0
23. Pine Bluff, Ark.	0	0	0	0.0	0.0
24. Poughkeepsie, N. Y.	**0**	**1**	**1**	**0.0**	**0.0**
25. Enid, Okla.	**0**	**1**	**1**	**0.0**	**0.0**
26. Richmond, Ind.	0	0	0	0.0	0.0
27. Cuyahoga Falls, Ohio	0	0	0	0.0	0.0
28. Zanesville, Ohio	0	0	1	0.0	0.0
29. Port Huron, Mich.	**0**	**1**	**1**	**0.0**	**0.0**
30. Ventura, Calif.	0	0	1	0.0	0.0
31. Gainesville, Fla.	**0**	**1**	**0**	**0.0**	**0.0**
32. Garden City, Mich.	0	0	0	0.0	0.0
33. Marion, Ohio	0	0	1	0.0	0.0
34. East Detroit, Mich.	**0**	**2**	**0**	**0.0**	**0.0**
35. Bloomington, Ind.	**0**	**1**	**0**	**0.0**	**0.0**
36. Boulder, Colo.	0	0	0	0.0	0.0
37. Portsmouth, Ohio	0	0	0	0.0	0.0
38. Menlo Park, Calif.	0	0	0	0.0	0.0
39. Granite City, Ill.	0	0	1	0.0	0.0
40. Hagerstown, Md.	**0**	**2**	**2**	**0.0**	**0.0**
41. Mountain View, Calif.	0	0	0	0.0	0.0
42. Michigan City, Ind.	**0**	**3**	**0**	**0.0**	**0.0**
43. Mishawaka, Ind.	**0**	**5**	**0**	**0.0**	**0.0**
44. Sandusky, Ohio	0	0	0	0.0	0.0
45. East Hartford, Conn.	0	0	0	0.0	0.0
46. East Cleveland, Ohio	**0**	**1**	**0**	**0.0**	**0.0**
47. Janesville, Wis.	0	0	1	0.0	0.0
48. Newburgh, N. Y.	**0**	**1**	**0**	**0.0**	**0.0**
49. Manchester, Conn.	**0**	**1**	**0**	**0.0**	**0.0**
50. Wausau, Wis.	0	0	1	0.0	0.0
51. Manhattan Bch., Calif.	0	0	0	0.0	0.0
52. Danbury, Conn.	**0**	**1**	**0**	**0.0**	**0.0**
53. West Orange, N. J.	**0**	**1**	**0**	**0.0**	**0.0**
54. Bartlesville, Okla.	0	0	0	0.0	0.0
55. South Euclid, Ohio	**0**	**1**	**0**	**0.0**	**0.0**
56. Monrovia, Calif.	0	0	1	0.0	0.0

	Three Months 1961	1960	1959	1961 Reg. Rate	1961 Pop. Rate
57. Westfield, N. J.	**0**	**1**	**0**	**0.0**	**0.0**
58. Easton, Pa.	0	0	0	0.0	0.0
59. Jackson, Tenn.	0	0	0	0.0	0.0
60. Baldwin Park, Calif.	0	0	0	0.0	0.0
61. Findlay, Ohio	0	0	0	0.0	0.0
62. Oak Park, Mich.	0	0	0	0.0	0.0
63. Big Spring, Tex.	0	0	2	0.0	0.0
64. Columbia, Mo.	0	0	1	0.0	0.0
65. Minot, N. D.	0	0	1	0.0	0.0
66. Burlington, Iowa	**0**	**1**	**0**	**0.0**	**0.0**
67. Edina, Minn.	0	0	0	0.0	0.0
68. Rock Hill, S. C.	0	0	0	0.0	0.0
69. Fond du Lac, Wis.	0	0	0	0.0	0.0
70. Grand Island, Neb.	0	0	0	0.0	0.0
71. Mason City, Iowa	0	0	0	0.0	0.0
72. Richfield, Minn.	**0**	**1**	**0**	**0.0**	**0.0**
73. Maywood, Ill.	0	0	0	0.0	0.0
74. Steubenville, Ohio	0	0	1	0.0	0.0
75. Goldsboro, N. C.	**0**	**1**	**2**	**0.0**	**0.0**
76. Fitchburg, Mass.	0	0	2	0.0	0.0
77. West Haven, Conn.	**0**	**2**	**0**	**0.0**	**0.0**
78. Allen Park, Mich.	0	0	0	0.0	0.0
79. Manitowoc, Wis.	0	0	0	0.0	0.0
80. Milford, Conn.	**0**	**2**	**0**	**0.0**	**0.0**
81. Kearny, N. J.	0	0	1	0.0	0.0
82. Birmingham, Mich.	0	0	0	0.0	0.0
83. Iowa City, Iowa	**0**	**1**	**0**	**0.0**	**0.0**
84. Kirkwood, Mo.	0	0	0	0.0	0.0
85. Port Chester, N. Y.	0	0	0	0.0	0.0
86. Hackensack, N. J.	**0**	**1**	**1**	**0.0**	**0.0**
87. Sherman, Tex.	0	0	1	0.0	0.0
88. Burlington, Vt.	0	0	0	0.0	0.0
89. Brownsville, Tex.	0	0	1	0.0	0.0
90. Concord, N. H.	**0**	**1**	**0**	**0.0**	**0.0**
91. Amsterdam, N. Y.	0	0	0	0.0	0.0
92. Rahway, N. J.	**0**	**1**	**0**	**0.0**	**0.0**
93. Webster Groves, Mo.	0	0	0	0.0	0.0
94. Shaker Heights, Ohio	0	0	0	0.0	0.0
95. Madison Hgts., Mich.	0	0	1	0.0	0.0
96. El Cerrito, Calif.	0	0	0	0.0	0.0
97. Denton, Tex.	0	0	1	0.0	0.0
98. Mt. Clemens, Mich.	0	0	0	0.0	0.0
99. Middletown, Conn.	0	0	1	0.0	0.0
100. Oak Ridge, Tenn.	0	0	1	0.0	0.0
101. Carlsbad, N. M.	0	0	0	0.0	0.0
102. New London, Conn.	**0**	**2**	**0**	**0.0**	**0.0**
103. Wallingford, Conn.	0	0	2	0.0	0.0
104. Wilmette, Ill.	0	0	0	0.0	0.0
105. Fairmont, W. Va.	**0**	**1**	**0**	**0.0**	**0.0**
106. Revere, Mass.	**0**	**2**	**1**	**0.0**	**0.0**
107. Urbana, Ill.	**0**	**1**	**0**	**0.0**	**0.0**
108. North Miami, Fla.	0	0	1	0.0	0.0
109. East Lansing, Mich.	0	0	0	0.0	0.0
110. Newport, R. I.	**0**	**1**	**0**	**0.0**	**0.0**
111. Highland Park, Ill.	0	0	2	0.0	0.0
112. Cranford, N. J.	0	0	0	0.0	0.0
113. Hazel Park, Mich.	**0**	**1**	**0**	**0.0**	**0.0**
114. Mt. Lebanon, Pa.	0	0	0	0.0	0.0
115. Leominster, Mass.	**0**	**2**	**0**	**0.0**	**0.0**
116. Park Forest, Ill.	0	0	0	0.0	0.0
117. Enfield, Conn.	0	0	0	0.0	0.0
118. Belmont, Mass.	0	0	0	0.0	0.0
119. Lackawanna, N. Y.	0	0	0	0.0	0.0
120. Ontario, Calif.	1	1	1	1.3	8.6
121. Yakima, Wash.	1	0	0	1.4	9.2
All cities in this group				1.4	6.8
122. Tallahassee, Fla.	**1**	**2**	**0**	**1.5**	**8.3**
123. Casper, Wyo.	1	0	0	1.6	10.3
124. Aurora, Colo.	1	1	0	1.7	8.2
125. Chula Vista, Calif.	**1**	**3**	**0**	**1.7**	**9.5**
126. Spartanburg, S. C.	**1**	**2**	**3**	**1.7**	**9.0**
127. Elmira, N. Y.	1	0	0	1.8	8.6
128. Rochester, Minn.	1	0	0	1.9	9.8
129. La Crosse, Wis.	1	0	1	1.9	8.4
130. Vancouver, Wash.	1	1	0	1.9	12.3
131. Santa Rosa, Calif.	**1**	**2**	**0**	**1.9**	**12.9**
132. Pocatello, Idaho	1	0	2	1.9	14.0
133. La Mesa, Calif.	1	0	0	2.0	13.2
134. Champaign, Ill.	1	1	0	2.0	8.1
135. Oshkosh, Wis.	1	0	0	2.0	8.9
136. Fargo, N. D.	1	1	0	2.0	8.6
137. Highland Park, Mich.	1	0	2	2.0	10.5
138. Sheboygan, Wis.	1	1	0	2.1	8.8
139. Bellingham, Wash.	**1**	**2**	**0**	**2.1**	**11.5**
140. Wyoming, Mich.	1	0	1	2.1	8.7
141. Des Plaines, Ill.	**1**	**2**	**0**	**2.1**	**11.5**
142. Chicago Heights, Ill.	**1**	**3**	**0**	**2.1**	**11.7**
143. Elmhurst, Ill.	1	1	0	2.2	10.8
144. Greeley, Colo.	1	0	0	2.3	15.2
145. Alton, Ill.	1	1	3	2.3	9.3
146. Fremont, Calif.	1	1	3	2.3	9.1
147. Ferndale, Mich.	1	0	0	2.3	12.8
148. Beloit, Wis.	1	0	0	2.3	12.2
149. Linden, N. J.	1	1	0	2.3	10.0
150. Santa Cruz, Calif.	1	0	0	2.3	15.6
151. Stratford, Conn.	1	0	1	2.3	8.9
152. Teaneck, N. J.	1	1	1	2.4	9.5
153. Galesburg, Ill.	1	0	0	2.4	10.8
154. Woonsocket, R. I.	1	1	0	2.4	8.5
155. Rome, Ga.	1	1	0	2.4	12.4

	Three Months 1961	1960	1959	1961 Reg. Rate	1961 Pop. Rate
156. Orange, Calif.	1	0	0	2.5	15.2
157. Ft. Pierce, Fla.	1	0	4	2.5	15.8
158. Waukesha, Wis.	1	0	2	2.5	13.3
159. National City, Calif.	1	0	0	2.6	12.2
160. Park Ridge, Ill.	1	0	0	2.6	12.2
161. Fairfield, Conn.	1	0	4	2.6	8.7
162. Fair Lawn, N. J.	1	0	0	2.7	11.0
163. Bangor, Maine	1	1	0	2.7	10.3
164. Austin, Minn.	1	0	0	2.7	14.3
165. Norwich, Conn.	**1**	**2**	**0**	**2.7**	**10.4**
166. Midland, Mich.	1	0	0	2.7	14.4
167. St. Cloud, Minn.	**1**	**2**	**0**	**2.7**	**11.8**
168. Lockport, N. Y.	1	0	0	2.8	15.2
169. Provo, Utah	1	0	0	2.8	11.1
170. Hamtramck, Mich.	**1**	**2**	**0**	**2.8**	**11.7**
171. Redlands, Calif.	1	0	1	2.9	14.9
172. Temple, Tex.	**1**	**2**	**1**	**2.9**	**13.2**
173. Torrington, Conn.	1	0	0	2.9	13.3
174. Garfield Hgts., Ohio	1	1	1	2.9	10.4
175. Ames, Iowa	1	0	0	3.0	14.8
176. Muskegon, Mich.	2	1	0	3.1	17.2
177. Montclair, N. J.	1	0	0	3.2	9.3
178. Kingsport, Tenn.	1	1	0	3.2	15.2
179. Grand Forks, N. D.	1	0	0	3.2	11.6
180. Freeport, Ill.	**1**	**2**	**0**	**3.2**	**14.9**
181. Hamden, Conn.	1	1	0	3.2	9.7
182. Modesto, Calif.	2	0	0	3.3	21.9
183. Elkhart, Ind.	2	1	0	3.4	19.9
184. Superior, Wis.	**1**	**3**	**2**	**3.4**	**11.9**
185. Maple Heights, Ohio	1	0	0	3.5	12.6
186. Wilmington, N. C.	2	0	2	3.6	18.2
187. Elyria, Ohio	2	0	0	3.6	18.3
188. Rapid City, S. D.	2	1	1	3.6	18.9
189. Beverly Hills, Calif.	2	0	2	3.9	26.0
190. St. Louis Park, Minn.	2	1	1	4.1	18.5
191. Westminster, Calif.	1	0	4	4.1	15.5
192. Danville, Va.	2	2	0	4.1	17.2
193. Eau Claire, Wis.	2	0	1	4.3	21.1
194. Mesa, Ariz.	2	0	2	4.4	23.7
195. Barberton, Ohio	2	1	0	4.6	23.7
196. Groton, Conn.	1	0	0	4.6	13.4
197. Burlington, N. C.	2	0	0	4.7	24.1
198. Bloomington, Ill.	2	1	0	4.9	22.0
199. Inkster, Mich.	2	1	0	5.1	20.5
200. Bristol, Conn.	2	1	0	5.4	17.6
201. Moline, Ill.	3	1	1	5.8	28.1
202. Norman, Okla.	2	0	1	5.8	24.0
203. Watertown, Mass.	2	0	0	6.3	20.5
204. Lewiston, Maine	2	0	0	6.7	19.6
205. Southgate, Mich.	2	0	0	6.8	27.2
206. Petersburg, Va.	3	0	0	8.6	32.6
207. Vineland, N. J.	4	2	3	9.6	42.4
208. Wyandotte, Mich.	5	0	0	11.5	46.0
209. Calumet City, Ill.	3	0	2	12.3	48.0
210. Southfield, Mich.	5	2	0	15.0	63.5

Group IX (10,000 to 25,000)

1. Medford, Ore.	0	0	1	0.0	0.0
2. Ponca City, Okla.	**0**	**1**	**0**	**0.0**	**0.0**
3. Lodi, Calif.	0	0	0	0.0	0.0
4. Pampa, Tex.	**0**	**1**	**0**	**0.0**	**0.0**
5. Covina, Calif.	0	0	0	0.0	0.0
6. Lake Worth, Fla.	0	0	0	0.0	0.0
7. La Porte, Ind.	0	0	0	0.0	0.0
8. Sumter, S. C.	**0**	**2**	**0**	**0.0**	**0.0**
9. Manhattan, Kan.	**0**	**1**	**0**	**0.0**	**0.0**
10. New Kensington, Pa.	0	0	2	0.0	0.0
11. Renton, Wash.	**0**	**1**	**0**	**0.0**	**0.0**
12. Ypsilanti, Mich.	0	0	0	0.0	0.0
13. South St. Paul, Minn.	0	0	0	0.0	0.0
14. Pittsburg, Calif.	0	0	0	0.0	0.0
15. Corvallis, Ore.	0	0	0	0.0	0.0
16. Wheaton, Ill.	**0**	**1**	**0**	**0.0**	**0.0**
17. Klamath Falls, Ore.	0	0	0	0.0	0.0
18. Annapolis, Md.	0	0	1	0.0	0.0
19. Lombard, Ill.	0	0	0	0.0	0.0
20. Xenia, Ohio	0	0	1	0.0	0.0
21. Plainview, Tex.	0	0	1	0.0	0.0
22. Tiffin, Ohio	0	0	0	0.0	0.0
23. Great Bend, Kan.	0	0	0	0.0	0.0
24. Jeffersonville, Ind.	0	0	0	0.0	0.0
25. Borger, Tex.	**0**	**1**	**2**	**0.0**	**0.0**
26. Monterey, Calif.	**0**	**1**	**0**	**0.0**	**0.0**
27. Richland, Wash.	0	0	0	0.0	0.0
28. Escondido, Calif.	0	0	1	0.0	0.0
29. Sedalia, Mo.	**0**	**1**	**0**	**0.0**	**0.0**
30. Columbia Hts., Minn.	**0**	**2**	**0**	**0.0**	**0.0**
31. Cedar Falls, Iowa	**0**	**1**	**0**	**0.0**	**0.0**
32. Lufkin, Tex.	0	0	0	0.0	0.0
33. Benton Harbor, Mich.	**0**	**1**	**1**	**0.0**	**0.0**
34. Ottawa, Ill.	**0**	**1**	**0**	**0.0**	**0.0**
35. Cape Girardeau, Mo.	0	0	0	0.0	0.0
36. Muscatine, Iowa	0	0	0	0.0	0.0
37. So. Portland, Maine	0	0	0	0.0	0.0
38. Texarkana, Ark.	0	0	1	0.0	0.0
39. Colton, Calif.	**0**	**1**	**0**	**0.0**	**0.0**
40. Brownwood, Tex.	0	0	1	0.0	0.0
41. Pittsburg, Kan.	0	0	0	0.0	0.0
42. Fairborn, Ohio	0	0	0	0.0	0.0

	Three Months 1961	1960	1959	1961 Reg. Rate	1961 Pop. Rate
43. Endicott, N. Y.	0	0	0	0.0	0.0
44. Whitefish Bay, Wis.	0	0	0	0.0	0.0
45. Pompano Beach, Fla.	**0**	**2**	**0**	**0.0**	**0.0**
46. Albert Lea, Minn.	0	0	1	0.0	0.0
47. Corsicana, Tex.	0	0	1	0.0	0.0
48. Moorhead, Minn.	0	0	1	0.0	0.0
49. Statesville, N. C.	0	0	0	0.0	0.0
50. Hibbing, Minn.	0	0	0	0.0	0.0
51. Glenview, Ill.	0	0	0	0.0	0.0
52. W. Springfield, Mass.	**0**	**1**	**1**	**0.0**	**0.0**
53. Chico, Calif.	0	0	0	0.0	0.0
54. East Haven, Conn.	0	0	0	0.0	0.0
55. Fremont, Ohio	0	0	0	0.0	0.0
56. Ashland, Ohio	0	0	0	0.0	0.0
57. Ada, Okla.	0	0	0	0.0	0.0
58. Evergreen Park, Ill.	0	0	0	0.0	0.0
59. So. Milwaukee, Wis.	0	0	1	0.0	0.0
60. Johnson City, N. Y.	0	0	0	0.0	0.0
61. Floral Park, N. Y.	0	0	0	0.0	0.0
62. Huntington, Ind.	0	0	0	0.0	0.0
63. Stillwater, Okla.	0	0	0	0.0	0.0
64. Wooster, Ohio	0	0	1	0.0	0.0
65. Streator, Ill.	0	0	0	0.0	0.0
66. Hillside, N. J.	0	0	0	0.0	0.0
67. Greenville, Tex.	**0**	**1**	**1**	**0.0**	**0.0**
68. Berkley, Mich.	0	0	1	0.0	0.0
69. Caldwell, Idaho	**0**	**1**	**2**	**0.0**	**0.0**
70. Uniontown, Pa.	0	0	0	0.0	0.0
71. Kennewick, Wash.	0	0	4	0.0	0.0
72. Oswego, N. Y.	0	0	0	0.0	0.0
73. Woodland, Calif.	0	0	0	0.0	0.0
74. Martinsville, Va.	0	0	3	0.0	0.0
75. Shorewood, Wis.	0	0	0	0.0	0.0
76. Livermore, Calif.	**0**	**1**	**0**	**0.0**	**0.0**
77. Valparaiso, Ind.	0	0	0	0.0	0.0
78. Greensburg, Pa.	0	0	0	0.0	0.0
79. El Dorado, Kan.	0	0	0	0.0	0.0
80. Antioch, Calif.	**0**	**1**	**0**	**0.0**	**0.0**
81. Greenwood, Miss.	**0**	**1**	**1**	**0.0**	**0.0**
82. Ocala, Fla.	0	0	0	0.0	0.0
83. Niles, Ohio	0	0	0	0.0	0.0
84. Sterling, Ill.	0	0	0	0.0	0.0
85. Pasco, Wash.	0	0	1	0.0	0.0
86. Stevens Point, Wis.	0	0	0	0.0	0.0
87. Meadville, Pa.	0	0	0	0.0	0.0
88. Fostoria, Ohio	0	0	0	0.0	0.0
89. Newton, Kan.	**0**	**1**	**0**	**0.0**	**0.0**
90. Snyder, Tex.	0	0	0	0.0	0.0
91. Collingswood, N. J.	**0**	**1**	**1**	**0.0**	**0.0**
92. La Grange, Ill.	0	0	0	0.0	0.0
93. McAlester, Okla.	0	0	1	0.0	0.0
94. Brookfield, Ill.	0	0	0	0.0	0.0
95. Mt. Pleasant, Mich.	0	0	0	0.0	0.0
96. De Kalb, Ill.	0	0	0	0.0	0.0
97. Pendleton, Ore.	0	0	0	0.0	0.0
98. Faribault, Minn.	0	0	0	0.0	0.0
99. Morton Grove, Ill.	0	0	0	0.0	0.0
100. East Moline, Ill.	0	0	0	0.0	0.0
101. Bristol, Va.	0	0	0	0.0	0.0
102. Lexington, N. C.	**0**	**1**	**0**	**0.0**	**0.0**
103. Defiance, Ohio	0	0	0	0.0	0.0
104. Owatonna, Minn.	0	0	0	0.0	0.0
105. Rocky River, Ohio	0	0	0	0.0	0.0
106. Prescott, Ariz.	0	0	0	0.0	0.0
107. Goshen, Ind.	0	0	1	0.0	0.0
108. Lamesa, Tex.	0	0	1	0.0	0.0
109. Santa Paula, Calif.	**0**	**1**	**0**	**0.0**	**0.0**
110. New Bern, N. C.	0	0	0	0.0	0.0
111. Port Angeles, Wash.	0	0	0	0.0	0.0
112. Boone, Iowa	0	0	0	0.0	0.0
113. Wisconsin Rpds., Wis.	0	0	0	0.0	0.0
114. Brainerd, Minn.	0	0	1	0.0	0.0
115. Wethersfield, Conn.	0	0	0	0.0	0.0
116. Sault Ste. Marie, Mich.	0	0	0	0.0	0.0
117. Logan, Utah	0	0	0	0.0	0.0
118. Garden City, Kan.	0	0	0	0.0	0.0
119. Junction City, Kan.	0	0	0	0.0	0.0
120. Fergus Falls, Minn.	0	0	0	0.0	0.0
121. Hays, Kan.	0	0	0	0.0	0.0
122. Auburn, Wash.	0	0	0	0.0	0.0
123. Hawthorne, N. J.	0	0	0	0.0	0.0
124. La Grange Park, Ill.	0	0	0	0.0	0.0
125. Tracy, Calif.	0	0	0	0.0	0.0
126. Massena, N. Y.	0	0	0	0.0	0.0
127. Rye, N. Y.	**0**	**1**	**0**	**0.0**	**0.0**
128. Waynesboro, Va.	0	0	0	0.0	0.0
129. North Adams, Mass.	0	0	1	0.0	0.0
130. State College, Pa.	0	0	0	0.0	0.0
131. Warren, Pa.	0	0	0	0.0	0.0
132. Vernon, Tex.	**0**	**1**	**1**	**0.0**	**0.0**
133. Watertown, Wis.	**0**	**1**	**0**	**0.0**	**0.0**
134. Naugatuck, Conn.	0	0	2	0.0	0.0
135. Reidsville, N. C.	**0**	**4**	**0**	**0.0**	**0.0**
136. Vernon, Conn.	0	0	0	0.0	0.0
137. Grosse Pt. Wds., Mich.	0	0	0	0.0	0.0
138. Winfield, Kan.	0	0	0	0.0	0.0
139. Moses Lake, Wash.	0	0	0	0.0	0.0
140. Marshfield, Wis.	0	0	0	0.0	0.0
141. Elizabeth City, N. C.	0	0	0	0.0	0.0
142. Dalles, Ore.	0	0	0	0.0	0.0
143. Galion, Ohio	0	0	0	0.0	0.0
144. Kenmore, N. Y.	0	0	0	0.0	0.0
145. Brawley, Calif.	0	0	0	0.0	0.0
146. Winnetka, Ill.	0	0	0	0.0	0.0
147. Escanaba, Mich.	0	0	0	0.0	0.0
148. Gardner, Mass.	0	0	0	0.0	0.0
149. Atchison, Kan.	**0**	**1**	**0**	**0.0**	**0.0**
150. Beaver Dam, Wis.	0	0	0	0.0	0.0
151. Hanford, Calif.	0	0	0	0.0	0.0
152. Ansonia, Conn.	**0**	**1**	**0**	**0.0**	**0.0**
153. South Orange, N. J.	0	0	1	0.0	0.0
154. Menasha, Wis.	0	0	0	0.0	0.0
155. Mitchell, S. D.	0	0	0	0.0	0.0
156. St. Joseph, Mich.	0	0	0	0.0	0.0
157. Albion, Mich.	0	0	0	0.0	0.0
158. Bay Village, Ohio	0	0	0	0.0	0.0
159. Los Alamos, N. M.	0	0	1	0.0	0.0
160. Fairfield, Ala.	0	0	0	0.0	0.0
161. Northbrook, Ill.	0	0	0	0.0	0.0
162. Bowling Green, Ohio	0	0	0	0.0	0.0
163. Dover, Ohio	**0**	**1**	**0**	**0.0**	**0.0**
164. Bellefontaine, Ohio	0	0	0	0.0	0.0
165. Van Wert, Ohio	0	0	0	0.0	0.0
166. Mansfield, Conn.	0	0	0	0.0	0.0
167. Circleville, Ohio	0	0	0	0.0	0.0
168. Fairfield, Calif.	0	0	0	0.0	0.0
169. Cudahy, Wis.	0	0	0	0.0	0.0
170. Windsor, Conn.	0	0	1	0.0	0.0
171. Pacific Grove, Calif.	0	0	0	0.0	0.0
172. Red Wing, Minn.	0	0	0	0.0	0.0
173. Grosse Pte. Pk., Mich.	0	0	0	0.0	0.0
174. Suffolk, Va.	0	0	0	0.0	0.0
175. Homewood, Ala.	0	0	1	0.0	0.0
176. Dyersburg, Tenn.	0	0	2	0.0	0.0
177. Cambridge, Md.	0	0	0	0.0	0.0
178. Central Falls, R. I.	0	0	0	0.0	0.0
179. Charles City, Iowa	0	0	0	0.0	0.0
180. Conneaut, Ohio	0	0	0	0.0	0.0
181. Rock Springs, Wyo.	0	0	0	0.0	0.0
182. Hornell, N. Y.	0	0	0	0.0	0.0
183. Warrensville Hts., Ohio	**0**	**1**	**0**	**0.0**	**0.0**
184. Bemidji, Minn.	0	0	1	0.0	0.0
185. River Forest, Ill.	0	0	0	0.0	0.0
186. Takoma Park, Md.	0	0	0	0.0	0.0

TRAFFIC DEATHS—STATE RECORDS

Deaths are reported by state traffic authorities.

All figures are preliminary. To insure proper comparisons, 1960 and 1959 figures cover the same reporting period as those for 1961.

Population Rate: U. S. population rate is the estimated annual number of deaths per 100,000 population, assuming that deaths for the rest of the year will follow the normal seasonal pattern. State population rate is the estimated annual number of deaths per 100,000 population, assuming that the monthly average of deaths will remain at the present average for the rest of the year. U. S. population rate is based on July 1, 1960 population estimate; state population rates are based on April 1, 1960 census, U. S. Bureau of the Census, Washington, D. C.

States shown in heavy type have improved in 1961 compared with 1960, or showed no change.

Mileage Rate: The number of deaths per 100 million vehicle miles of travel.

(Figures in parenthesis following the 1961 mileage rate indicate the number of months for which the mileage rate is calculated for each state.)

	Months Reported	Deaths Identical Periods 1961	1960	1959	% Change 1960 to 1961	1959 to 1961	1961 Pop. Rate	1961 Mile. Rate	
TOTAL U.S.	3	7,730	7,670	8,104	+ 1%	— 5%	21.1	4.6	(3)
Ala.	3	187	162	182	+ 15%	+ 3%	22.9	6.7	(1)
Alaska	3	3	3	4	0%	— 25%	5.3	—	—
Ariz.	**3**	**99**	**112**	**132**	**— 12%**	**— 25%**	**30.4**	**6.5**	**(2)**
Ark.	3	93	77	79	+ 21%	+ 18%	20.8	5.4	(2)
Calif.	3	876	799	837	+ 10%	+ 5%	22.3	4.5	(2)
Colo.	3	85	73	67	+ 16%	+ 27%	19.4	—	—
Conn.	**3**	**51**	**53**	**53**	**— 4%**	**— 4%**	**8.0**	**1.6**	**(1)**
Del.	**3**	**13**	**18**	**15**	**— 28%**	**— 13%**	**11.7**	**1.2**	**(2)**
D. of C.	3	5	19	16	— 74%	— 69%	2.6	—	—
Fla.	**3**	**288**	**334**	**304**	**— 14%**	**— 5%**	**23.3**	**5.6**	**(2)**
Ga.	**3**	**193**	**230**	**225**	**— 16%**	**— 14%**	**19.6**	**4.5**	**(1)**
Hawaii	3	16	23	26	— 30%	— 38%	10.1	—	—
Idaho	**3**	**45**	**35**	**53**	**+ 29%**	**— 15%**	**27.0**	**6.4**	**(1)**
Ill.	3	354	322	346	+ 10%	+ 2%	14.0	3.9	(1)
Ind.	**3**	**201**	**226**	**220**	**— 11%**	**— 9%**	**17.2**	**4.9**	**(2)**
Ia.	3	123	103	149	+ 19%	— 17%	17.8	4.6	(1)
Kan.	3	107	87	115	+ 23%	— 7%	19.6	5.2	(1)
Ky.	**3**	**138**	**147**	**164**	**— 6%**	**— 16%**	**18.2**	**—**	**—**
La.	**3**	**166**	**183**	**159**	**— 9%**	**+ 4%**	**20.4**	**7.0**	**(2)**
Maine	**3**	**24**	**25**	**29**	**— 4%**	**— 17%**	**9.9**	**2.8**	**(2)**
Md.	**3**	**78**	**117**	**122**	**— 33%**	**— 36%**	**10.1**	**3.4**	**(1)**
Mass.	**3**	**105**	**106**	**113**	**— 1%**	**— 7%**	**8.2**	**—**	**—**
Mich.	**3**	**286**	**286**	**213**	**0%**	**+ 34%**	**14.6**	**4.0**	**(2)**
Minn.	3	144	119	124	+ 21%	+ 16%	16.9	5.9	(1)
Miss.	**3**	**122**	**150**	**131**	**— 19%**	**— 7%**	**22.4**	**6.7**	**(2)**
Mo.	**3**	**213**	**218**	**182**	**— 2%**	**+ 17%**	**19.7**	**4.9**	**(2)**
Mont.	3	56	31	33	+ 81%	+ 70%	33.2	9.9	(1)
Neb.	3	63	44	59	+ 43%	+ 7%	17.9	3.9	(2)
Nev.	3	41	24	30	+ 71%	+ 37%	57.5	11.4	(1)
N. H.	3	14	10	24	+ 40%	— 42%	9.2	2.3	(2)
N. J.	3	132	154	165	— 14%	— 20%	8.7	2.5	(1)
N. M.	3	65	93	98	— 30%	— 34%	27.3	5.2	(2)
N. Y.	3	363	385	438	— 6%	— 17%	8.7	3.2	(2)
N. C.	3	228	228	273	0%	— 16%	20.0	5.8	(1)
N. D.	3	24	20	25	+ 20%	— 4%	15.2	—	—
Ohio	**3**	**311**	**361**	**327**	**— 14%**	**— 5%**	**12.8**	**3.5**	**(1)**
Okla.	3	144	111	140	+ 30%	+ 3%	24.7	5.0	(1)
Ore.	3	94	75	97	+ 25%	— 3%	21.3	5.0	(2)
Pa.	2	156	243	222	— 36%	— 30%	8.3	2.6	(1)
R. I.	3	19	13	19	+ 46%	0%	8.8	2.5	(2)
S. C.	**3**	**141**	**163**	**122**	**— 13%**	**+ 16%**	**23.7**	**6.3**	**(1)**
S. D.	3	36	34	42	+ 6%	— 14%	21.2	5.5	(2)
Tenn.	**3**	**152**	**156**	**143**	**— 3%**	**+ 6%**	**16.6**	**3.2**	**(1)**
Tex.	3	473	441	551	+ 7%	— 14%	19.8	4.1	(1)
Utah	**3**	**38**	**42**	**30**	**— 10%**	**+ 27%**	**17.1**	**6.0**	**(1)**
Vt.	**3**	**5**	**16**	**21**	**— 69%**	**— 76%**	**5.1**	**0.9**	**(2)**
Va.	3	166	147	179	+ 13%	— 7%	16.7	4.1	(2)
Wash.	**3**	**120**	**120**	**112**	**0%**	**+ 7%**	**16.8**	**4.2**	**(2)**
W. Va.	3	73	60	87	+ 22%	— 16%	15.7	5.2	(1)
Wis.	3	185	154	141	+ 20%	+ 31%	18.7	6.1	(1)
Wyo.	3	28	16	27	+ 75%	+ 4%	33.9	8.8	(2)
P. R.‡	2	52	48	39	+ 8%	+ 33%	13.3	—	—
V. I.†	2	0	1	0	—100%	0%	0.0	—	—
CANADIAN PROVINCES									
Alta.	2	21	38	20	**— 45%**	**+ 5%**	**10.9**	—	—
Man.	2	10	8	13	+ 25%	— 23%	7.0	—	—
Ont.	2	141	126	137	+ 12%	+ 3%	18.4	—	—
Sask.	**2**	**11**	**13**	**3**	**— 15%**	**+267%**	**7.5**	—	—

‡Commonwealth of Puerto Rico

†Virgin Islands

	Three Months 1961	1960	1959	1961 Reg. Rate	1961 Pop. Rate
187. Vacaville, Calif.	0	0	0	0.0	0.0
188. Marinette, Wis.	0	0	1	0.0	0.0
189. Moscow, Idaho	0	0	0	0.0	0.0
190. River Rouge, Mich.	**0**	**1**	**1**	**0.0**	**0.0**
191. Monmouth, Ill.	0	0	0	0.0	0.0
192. Cadillac, Mich.	0	0	0	0.0	0.0
193. Brigham City, Utah	0	0	0	0.0	0.0
194. Two Rivers, Wis.	0	0	1	0.0	0.0
195. Monroe, N. C.	0	0	0	0.0	0.0
196. Ecorse, Mich.	0	0	0	0.0	0.0
197. University Hts., Ohio	0	0	0	0.0	0.0
198. Sulphur, La.	0	0	1	0.0	0.0
199. Brook Park, Ohio	**0**	**2**	**0**	**0.0**	**0.0**
200. Menominee, Mich.	0	0	0	0.0	0.0
201. Stoughton, Mass.	0	0	0	0.0	0.0
202. Covington, Va.	0	0	0	0.0	0.0
203. Ironwood, Mich.	0	0	0	0.0	0.0
204. Auburn, Mass.	**0**	**1**	**0**	**0.0**	**0.0**
205. Winchester, Conn.	0	0	1	0.0	0.0
206. Hurst, Tex.	0	0	1	0.0	0.0
207. Beacon, N. Y.	**0**	**1**	**0**	**0.0**	**0.0**
208. La Salle, Ill.	**0**	**1**	**0**	**0.0**	**0.0**
209. Webster, Mass.	0	0	0	0.0	0.0
210. Ridgefield Pk., N. J.	0	0	0	0.0	0.0
211. Western Springs, Ill.	0	0	0	0.0	0.0
212. Brooklyn, Ohio	0	0	1	0.0	0.0
213. Derby, Conn.	**0**	**2**	**0**	**0.0**	**0.0**
214. Ashland, Wis.	0	0	0	0.0	0.0
215. Stonington, Conn.	0	0	1	0.0	0.0
216. Killingly, Conn.	0	0	1	0.0	0.0
217. Farmington, Conn.	**0**	**3**	**1**	**0.0**	**0.0**
218. Donora, Pa.	0	0	0	0.0	0.0
219. Rolling Meadows, Ill.	0	0	0	0.0	0.0
All cities in this group				1.4	7.2
220. Yuma, Ariz.	**1**	**2**	**0**	**2.6**	**16.7**
221. Walla Walla, Wash.	1	0	0	2.8	16.3
222. Fort Myers, Fla.	1	1	0	2.8	17.8
223. Longview, Wash.	1	0	0	2.8	17.2
224. Merced, Calif.	1	0	2	3.0	19.9
225. Los Altos, Calif.	1	0	2	3.0	20.3
226. Bell, Calif.	**1**	**3**	**0**	**3.1**	**20.5**
227. Glendora, Calif.	1	0	2	3.1	19.2
228. Monroe, Mich.	1	1	0	3.1	17.4
229. Florence, S. C.	1	0	3	3.1	16.2
230. Kinston, N. C.	1	1	0	3.2	16.1
231. Adrian, Mich.	1	1	0	3.5	19.7
232. Winona, Minn.	1	0	0	3.6	16.1
233. North Platte, Neb.	1	0	0	3.6	23.3
234. Griffin, Ga.	1	1	0	3.6	18.4
235. Houma, La.	1	0	0	3.7	17.7
236. Denison, Tex.	1	0	1	3.7	17.6
237. Butler, Pa.	1	0	0	3.7	19.0
238. San Fernando, Calif.	1	0	0	3.8	24.8
239. Traverse City, Mich.	1	0	0	3.9	21.7
240. Westport, Conn.	1	0	0	3.9	19.0
241. Muskegon Hts., Mich.	1	0	0	3.9	20.4
242. Emporia, Kan.	1	0	0	3.9	22.0
243. Tempe, Ariz.	1	0	2	4.1	16.1
244. Augusta, Maine	1	0	0	4.2	18.4
245. Elmwood Park, Ill.	1	0	0	4.2	16.7
246. Marietta, Ohio	1	0	0	4.3	23.8
247. Connersville, Ind.	1	0	1	4.3	22.6
248. Morristown, N. J.	1	1	0	4.3	22.6
249. Redding, Calif.	1	0	0	4.7	31.3
250. Arkansas City, Kan.	1	0	1	4.7	28.0
251. Alpena, Mich.	1	0	2	4.9	27.2
252. Marquette, Mich.	1	0	0	4.9	20.2
253. Norfolk, Neb.	1	0	0	5.0	30.5
254. Niles, Mich.	1	0	0	5.2	29.0
255. Mt. Vernon, Ill.	1	0	0	5.2	25.6
256. Shelton, Conn.	1	0	0	5.3	22.0
257. Canton, Ill.	1	0	1	5.3	29.4
258. Napa, Calif.	2	1	0	5.4	36.0
259. Darien, Conn.	1	1	1	5.4	21.7
260. Windham, Conn.	1	1	0	5.5	23.5
261. Millbrae, Calif.	1	0	0	5.6	25.2
262. Astoria, Ore.	1	0	0	5.6	35.7
263. Coon Rapids, Minn.	**1**	**2**	**0**	**5.6**	**26.8**
264. Holland, Mich.	2	1	0	5.8	32.3
265. Hopewell, Va.	1	0	0	5.8	22.3
266. Coronado, Calif.	1	0	1	6.0	22.2
267. Southington, Conn.	1	1	0	6.1	17.5
268. North Olmsted, Ohio	1	0	0	6.1	24.5
269. Henderson, N. C.	1	0	0	6.2	31.5
270. Highland Park, Tex.	1	0	0	6.3	38.5
271. Virginia, Minn.	1	0	0	6.6	28.6
272. Westlake, Ohio	1	1	1	7.0	31.0
273. Du Bois, Pa.	1	0	1	7.3	37.4
274. Aberdeen, S. D.	2	0	1	7.5	17.3
275. Milford, Mass.	1	1	1	7.5	25.5
276. Maumee, Ohio	1	0	0	7.5	33.1
277. Glastonbury, Conn.	1	0	0	7.7	27.6
278. North Chicago, Ill.	1	1	0	7.9	19.5
279. Jennings, La.	1	0	1	7.9	33.6
280. Bellaire, Ohio	1	0	0	8.2	34.8
281. Watertown, Conn.	1	0	1	9.3	27.0
282. Peru, Ind.	2	0	0	9.3	55.2
283. Bellevue, Wash.	2	0	0	9.8	62.5
284. Salisbury, N. C.	3	0	0	11.0	56.3
285. Branford, Conn.	2	0	0	11.7	48.2
286. Albany, Calif.	2	0	0	11.9	54.1
287. New Canaan, Conn.	3	0	0	17.3	88.9
288. Owosso, Mich.	7	1	0	29.4	164.7
CANADIAN CITIES					
Toronto, Ont.	26	26	20	—	6.8
Hamilton, Ont.	5	7	6	—	7.6
London, Ont.	5	0	1	—	19.7

MOTOR VEHICLE DEATHS AND INJURIES BY STATES 1961 and 1960

Twenty-seven states and the District of Columbia have reported their death and injury experience for one to two months of 1961.

The table below shows all of the injury data reported by each state, but little information is available on precisely what injuries are included in each state's tabulation.

Differences in the ratio of injuries to deaths probably reflect primarily differences in the extent to which all injuries are reported. Other factors are undoubtedly involved, such as: (1) a few states omit some or all of the injuries in urban accidents; (2) there are large differences between states in the proportion of travel which is in urban area (the injury-death ratio for urban accidents is about four times the ratio for rural accidents).

The question of what injuries are being reported applies with equal force to the per cent change in injuries from 1960 to 1961. Any tightening up of police administration, any emphasis on "get all the injuries" is almost certain to bring about an increase in reported injuries, but probably only in minor ones. Similarly, instructions to "skip the scratches" probably would result in a decrease in recorded cases in many states. Introduction of financial responsibility laws has been observed to increase reported injuries sharply. Even the public's increased claims-consciousness is regarded by many people as an element in the growing number of injuries reported. With such factors operating to destroy comparability, indicated changes in the number of injuries should not be considered as reliable.

	Months Reported	Deaths†† 1961	Deaths†† 1960	Injuries†† 1961	Injuries†† 1960	% Change 1960 to 1961 Deaths	% Change 1960 to 1961 Injuries	1961 Ratio of Injuries to Deaths
TOTAL U.S.	**	2,026#	2,164#	72,988	69,126	— 6#	+ 6	36
Ala.	2	118	91	593†	686†	+ 30	— 14	5
Ariz.								
Ark.	2	64	57	699	460	+ 12	+ 52	11
Calif.	1	277	282	12,310	11,582	— 2	+ 6	44
Colo.								
Conn.								
Del.	1	3	10	194	209	— 70	— 7	65
D. of C.	2	0	17	959	1,135	—100	— 16	¶¶
Fla.								
Ga.	2	116	155	2,904	2,985	— 25	— 3	25
Idaho								
Ill.	1	120	142	8,457	7,588	— 15	+ 11	70
Ind.	1	67	80	2,870	2,621	— 16	+ 10	43
Ia.								
Kan.								
Ky.								
La.	2	114	117	1,193†	1,223†	— 3	— 2	10
Maine	2	16	20	980	981	— 20	— *	61
Md.								
Mass.								
Mich.	2	179	193	12,819	12,445	— 7	+ 3	72
Minn.	2	106	89	4,965	3,508	+ 19	+ 42	47
Miss.	2	78	95	1,212	1,150	— 18	+ 5	16
Mo.	2	137	163	1,646	1,800	— 16	— 9	12
Mont.	1	20	13	220	287	+ 54	— 23	11
Neb.	1	15	17	785	912	— 12	— 14	52
Nev.								
N. H.	2	8	8	1,321	1,002	0	+ 32	165
N. J.								
N. M.	1	19	34	480	431	— 44	+ 11	25
N. Y.								
N. C.	1	74	80	2,057	1,970	— 8	+ 4	28
N. D.	1	9	5	133	124	+ 80	+ 7	15
Ohio								
Okla.								
Ore.	1	31	26	1,276	1,237	+ 19	+ 3	41
Pa.								
R. I.								
S. C.	1	45	66	969	874	— 32	+ 11	22
S. D.	2	20	23	369	392	— 13	— 6	18
Tenn.								
Tex.	2	292	276	8,926	9,306	+ 6	— 4	31
Utah								
Vt.	2	2	11	459	422	— 82	+ 9	230
Va.								
Wash.	1	30	41	2,598	2,386	— 27	+ 9	87
W. Va.	2	42	42	1,145	1,086	0	+ 5	27
Wis.								
Wyo.	2	24	11	449	324	+118	+ 39	19
V. I.¶	2	0	1	27	28	—100	— 4	¶¶

†Rural injuries only.

††All figures are preliminary. To insure proper comparisons, 1960 figures cover the same reporting period as those for 1961.

*Less than .5%.

**Death and injury totals cover reports for all months indicated in this column.

#Death totals and changes differ from national figures because those shown here are based on the states and months for which injury data are reported.

¶Virgin Islands.

¶¶Ratio cannot be calculated due to 0 in 1961 death total.

Safety Library

From Page 4

Board 2101 Constitution Ave., Washington 25, D. C.

Engineering

1961 SAE Handbook, 1961, 914pp. Society of Automotive Engineers, 485 Lexington Ave., New York 17, N. Y.

Highways

Court Okays Billboard Seizure as a Traffic Hazard. *The American City*, March, 1961, p. 87.

Garden State Parkway, 1960 Annual Report of the New Jersey Highway Authority. 1961, 24pp. Garden State Parkway, New Jersey Highway Authority, 12 Broad St., Red Bank, N. J.

The Problem of Capacity in Road Planning. Dr. Ing J. Schlums. *International Road Safety and Traffic Review*. Winter, 1961, p. 14-22.

Rose Bushes Fail Tests—Closer Planting Urged. *Automotive Safety*, February, 1961, p. 4.

Inspection

Safety Check Passes 5 Of 6: Fewer Vehicles Need Attention. *Automotive Safety*. February, 1961, p. 12.

Insurance

Casualty Insurance Handbook, 1961, p. 22-34. Insurance Information Institute, 60 John St., New York 38, N. Y.

Lighting

Some of the Best in Street Lighting. H. C. Mayer. *The American City*, March, 1961, p. 127, 129.

Medical Aspects

As an Apology to Those Who Are About to Die. Fletcher D. Woodward. Police. March-April, 1961, p. 35-38.

Motor Transportation Industry

Motor Carriers Play Prominent Part in Promotion of Highway Safety in Kentucky. *Highway Traffic*. March, 1961, p. 9.

A Partnership that Pays Off in Safety. *Highway Highlights*. March, 1961, p. 16-17. (Truck drivers and state police on highways in case of accident.)

Police

Road Conditions, Part one. *Traffic Digest and Review*. March, 1961, p. 12-17, 26. (In addition to enforcement, the responsibilities of a traffic officer include initiating action to take care of street or highway hazards.)

Programs and Studies

California Traffic Inventory. Lee Backstrand. *Traffic Digest and Review*. March, 1961, p. 20-23.

Public Opinion

Auto Show Visitors Prove Safety-Conscious in Survey: Majority Found to Favor More Roads — Stricter Tests. *Automotive Safety*. February, 1961, p. 5, 12.

Lively Interest in Traffic Safety Ideas Expressed in Motor Vehicle Opinion Poll. *Wisconsin Traffic Safety Reporter*. February, 1961, p. 1-2, 3.

Public Support

Blueprint for Public Support, Part One. Edward M. Johnson. *Traffic Digest and Review*. March, 1961, p. 8-10, 27-32.

Research

ASF Embarks on Year-long Search for Research Data: Studies Effects of Road Design and Controls on Accidents. *Automotive Safety*. February, 1961, p. 10.

Safety Stamp

Seek Safety Postage Stamps. *Automotive Safety*. February, 1961, p. 4. (Two bills introduced in 87th Congress for stamps to honor traffic safety efforts.)

Signs and Signals

The Driver Gets a Break. Henry M. De Noble. *Highway Highlights*. March, 1961, p. 15, 20.

Greater Standardization of Traffic Signs, Signals and Markings in Making. *Highway Traffic*. March, 1961, p. 12-13.

New Manual Seeks Uniform Traffic Signs and Signals. Only standard controls to be approved for federal-aid roads. *Automotive Safety*. February, 1961, p. 9.

HELP SOLVE IT WITH

FLEX-O-LITE GLASS BEADS

The appalling loss of lives on our streets and highways is one of the great tragedies of our time. Among the several factors affecting highway safety, none is of greater importance than the need for minimizing nighttime accidents. Flex-O-Lite Reflective Beads offer one of the most effective means of reducing the hazards of night driving. Clearer, brighter, longer lasting spheres by Flex-O-Lite are available for every need, including:

- **Highway Centerlines and Edgelines.**
- **Traffic Signs and Markers.**
- **Safety Spheres for Danger Points where ultra-high brilliance is required.**
- **Also—Traffic and Sign Bead Dispensers.**

Optical quality, medium index of refraction beads also available for colored backgrounds such as: red stop signs, evacuation route markers, street name signs, expressway signs, etc.

FLEX-O-LITE MANUFACTURING CORP.
8301 Flex-O-Lite Drive, St. Louis 23, Missouri • Paris, Texas
Flex-O-Lite of Canada, Ltd., P. O. Box 216, St. Thomas, Ont., Canada

Circle Item No. 3—Reader Service Card

Simulation

Driving Simulation Research. Slade Hulbert and Charles Wojcik. *Highway Research Bulletin*, 261, 1961, p. 1-13. Highway Research Board, 2101 Constitution Ave., Washington 25, D. C.

Engineering and Psychological Uses of a Driving Simulator. Bernard H. Fox. Highway Research Bulletin, 261, 1960, p. 14-27. Highway Research Board, 2101 Constitution Ave., Washington 25, D. C.

Experience with Simulation Techniques in the Automotive Industry. John Versace, 1961, 11pp. Available from author, Chrysler Corp. Detroit, Mich. (Presented at the National Conference on Driving Simulation, Santa Monica, Calif., Feb. 27, Mar. 1, 1961.)

Some Technical Considerations in Driving Simulation. Bernard H. Fox. Highway Research Bulletin, 261, 1961, p. 38-43. Highway Research Board, 2101 Constitution Ave., Washington 25, D. C.

Traffic

Installation of Two-way Median Left Turn Lane. James C. Ray. *Traffic Engineering*. March, 1961, p. 25-27.

Traffic Characteristics and Phenomena on High Density Controlled Access Facilities. Adolf D. May. *Traffic Engineering*. March, 1961, p. 11-19, 56.

Violators

Evanston Sentences Violators to School. Robert V. Hudson. *Traffic Digest and Review*. March, 1961, p. 18-19, 40.

Few Drivers Jailed for Accidents Involving Fatalities: Michigan Study Finds Only Small Minority Appear in Court. *Automotive Safety*. February, 1961, p. 2.

ADDRESSES OF MAGAZINES MENTIONED

The American City
470 Fourth Ave.
New York 16, N. Y.

Automotive News
2666 Penofscot Bldg.
Detroit 26, Mich.

Automotive Safety
320 New Center Bldg.
Detroit 2, Mich.

California Highway Patrolman
1213 H. St.
Sacramento 3, Calif.

Highway Highlights
National Press Bldg.
Washington 4, D. C.

Highway Traffic
601-3 Republic Bldg.
Louisville 2, Ky.

International Road Safety and Traffic Review
32 Chesham Pl.
London, S. W. 1, England

The Magazine of Standards
70 E. 45th St.
New York 17, N. Y.

Medicine at Work
1411 K St., N. W.
Washington 5, D. C.

Police
301-327 E. Lawrence Ave.
Springfield, Ill.

Popular Science
353 Fourth Ave.
New York 10, N. Y.

Safety News
Terminal House 52
Grosvenor Gardens
London, S. W. 1, England

Traffic Digest and Review
1804 Hinman Ave.
Evanston, Ill.

Traffic Engineering
2029 K. St., N. W.
Washington 6, D. C.

Wisconsin Traffic Safety Reporter
State Division
Motor Vehicle Department
Madison 2, Wis.

GUARD-GATE
PATENTED
expansion
SAFETY
BARRICADE
THOUSANDS IN USE nationwide by highway, police and fire departments, by contractors, industrial plants and military establishments.
GUARD-GATE is a practical, all-steel safety barricade that instantly extends to full length, yet collapses to just inches for easy storage. Comes complete with basic mountings for flasher warning lights, flares and signs.
Glass-beaded reflectorization on traffic-yellow cross bars gives maximum night time visibility. Fibre board box serves as carrying case.
WEIGHT APPROX. 20 LBS.
36" HIGH OPEN
COLLAPSES COMPACTLY FOR STORAGE
AVAILABLE IN 4, 6 and 8 FT. MODELS AT SAFETY DEALERS and HIGHWAY EQUIPMENT DISTRIBUTORS
WEST SIDE
IRON WORKS, Inc.
327 FRONT AVE., N.W.
GRAND RAPIDS 4, MICH., USA
Circle Item No. 4—Reader Service Card

News from Capitol Hill

From Page 11

partment of Commerce proposed that this bill be deferred until the President's Commission on Intergovernmental Relations could give consideration to the problems of federal-state relations raised by the bill. The committee members took unkindly to this suggestion. A substitute bill was proposed by the American Trucking Associations whereby the statute would define hydraulic brake fluid as a substance meeting specified SAE standards, require proper labeling of all fluid containers, and then make it illegal to ship in interstate commerce any brake fluid not so labeled.

The two other bills which had committee hearings were: H.R.903 (Bennett), to require certain safety devices on motor vehicles, and H.R.1341 (Roberts) to require federal passenger vehicles to meet certain safety standards. The ATA concurred with the objective of H.R.1341, but proposed as a substitute an advisory committee on safety equipment to develop recommended procedures to guide federal agencies in the procurement of such safety equipment. ATA opposed H.R.903 because it mandated federal standards on motor vehicle design. The Insurance Institute for Highway Safety opposed H.R.903, especially its provision dealing with speed governors. The Association for the Aid of Crippled Children, the American Federation of Government Employees, and the American Medical Association supported H.R.1341.

During the course of the hearings, several committee members expressed displeasure with the alleged failure of the Department of Commerce to assume federal leadership in the traffic safety field, and Congressman Roberts voiced the thought that perhaps authority should be vested in another agency of the government. Further hearings were scheduled for mid-April to ascertain what government agencies are doing in the field of traffic safety and related research activities. The U. S. Public Health Service stated its readiness to undertake "a great deal of this type of research."

Senator Magnuson, chairman of the Senate Committee on Interstate and Foreign Commerce, introduced an administration bill, S.1440, to amend the driver registration bill enacted last year for the purpose of adjusting its terms to the practice of the states in connection with license withdrawals, so as to enable more states to participate in the registry program.

Commercial Transportation

At the request of the Interstate Commerce Commission, Senator Magnuson, chairman of the Senate Committee on Interstate and Foreign Commerce, introduced S.1287, to make it clear that ICC regulations respecting safety of operations of motor vehicles are applicable to private carriers of property. This bill is deemed necessary because of a recent court decision which casts doubt on the ICC's power in this regard. The ICC said that there were over 75,000 private carriers of property operating over 675,000 vehicles in interstate commerce: "with this number of vehicles on the nation's highways, the incidence of exposure to accidents is very great."

The ICC amended its rules to permit motor carriers to use certain dry chemical type fire extinguishers, if of adequate rating by tests.

Farm Safety

The President also designated the week of July 23 as National Farm Safety Week. He called attention to the more than one million farm residents who were injured and the thousands who were killed in accidents on farms, and urged all farm residents to remember that "safety is a family affair."

Miscellaneous

The World Health Organization devoted a special issue of its magazine *World Health* to accidents in the home, on the road, on the farm, and in industry.

"By-guess -and -by gosh" evidence convicts no drunken drivers

THE unsupported opinion of the arresting officer is seldom sufficient to convict a drunken driver. But when that opinion is backed by a BREATHALYZER test—it's a different matter. This instrument measures the proportion of alcohol in the blood by a simple breath test. It does not violate the legal rights of the defendant in any way. The BREATHALYZER provides an unalterable record — with finger-prints — for evidence acceptable in court. It is inexpensive to operate, requires little maintenance, and its principle is easy to explain in a courtroom.

Send coupon for information or free demonstration.

STEPHENSON CORPORATION
RED BANK NEW JERSEY

Also manufacturers of the Harger Drunkometer, the Stephenson Radar Speedalyzer, and the Minuteman Resuscitator.

STEPHENSON CORPORATION, Red Bank, New Jersey

☐ Please send me Breathalyzer Bulletin J 5

☐ Please arrange for demonstration

NAME_____

TITLE_____

STREET_____

CITY_____ STATE_____

Circle Item No. 5—Reader Service Card

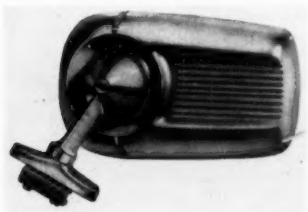
NEW... SAFETY EQUIPMENT

Publication of product announcements in this section should not be construed as endorsement or approval by the National Safety Council.

Childrens Auto Seat Belt

Safe-Hi's automobile safety belt for small children is designed to provide maximum protection even in the most severe crash. Exclusive back strap construction allows child freedom of movement whether in a standing, sitting or sleeping position. Adjustable, the belt is said to fit and protect children from infancy up to six years of age. Made of nylon webbing the belt features a quick release, heavy duty metal buckle which is out of the childs reach but can be operated by the accompanying adult. Soft, light and comfortable and can be worn for hours without tiring the child. The belt can be washed without damage to the nylon webbing.

Rose Mfg. Co., 2700 West Barberry Place, Denver 4, Colorado (Item 41)



Double-Duty Car Mirror

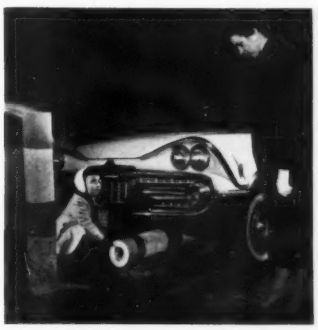
Yankee Metal Products Corp. announces the addition of a new clamp-on and body-mount mirror (#460) to the Yankee line. The combination mirror has double-nickel plating beneath its chrome finish. Constructed of rust-proof, die-cast material with a non-glare, distortion-free glass recessed for visored protection. It features the Yankee Adjus-toLock head. Adjustit, lock it, forget it. Said to fit all cars, standard, compact, and foreign.

Yankee Metal Products Corp., 25 Grand St., Norwalk, Conn. (Item 42)

Infrared Vehicle Count Detector

This infrared vehicle counter is an active type detector which produces its own modulated source of infrared energy and detects the reflection of that energy as vehicles pass through its 1½ x 6 ft. curtain of radiation across the vehicle lane. The "curtain" cross-section, though invisible, detects within an area equivalent of the well known pressure detector, thus eliminating possibility of cars passing around the side of the detected area. The possibility of extending the count in bumper to bumper traffic is reduced to an absolute minimum, and the Eagle "I" does not detect the roadway, therefore, the possibility of false calls are virtually eliminated.

Eagle Signal Co., 202-20th Street, Moline, Illinois (Item 43)



Flexible Rubber Posts

Patterned after rubber dock fenders used to protect ships and piers, these virtually indestructible guards have dramatically demonstrated their effectiveness in safeguarding motorists. The guards are made by the Goodyear Tire & Rubber Co. of a high tensile rubber compound. Requiring little maintenance they can be customized to fit all traffic safety requirements according to the manufacturer. Each post consists of a five-foot-high hollow rubber cylinder mounted on an 18-inch-long concrete-imbedded steel core that extends only a few inches above ground. This permits the cylinder to absorb the full impact when struck. On impact, each post becomes increasingly resistant to flexing as the vehicle forces it from a vertical to a horizontal position, resulting in a braking action much like the stretching of a rubber band. This prevents the vehicle from possible further collisions with oncoming traffic in another lane, the company points out.

Goodyear Tire & Rubber Co., 1144 E. Market St., Akron 16, Ohio (Item 44)

Emergency Flasher Light

A new emergency flasher light for passenger cars is announced by R. D. Fageol Co., Kent, Ohio. Known as PC-1, it is said to be ideal for warning use, either day or night. Plugged into the car's cigarette lighter and operating from the battery, the light is reported to produce over 70 brilliant red flashes per minute in 2 directions. It has 4-inch optical plastic fresnel lenses, held in a weather-proof metal head with stainless steel protective rings. Lenses are claimed to afford peak diffusion. Said to be visible approximately 1 mile in each direction. Furnished complete with 10 ft. of cord and slip-in plug. A dual purpose bracket provides easy attachment to either drip ledge or window of any car. Battery current requirements of the light are said to be negligible and its transistor bulb has a minimum life of 500 hours.

R. D. Fageol Co., Kent, Ohio (Item 45)

For More Information—Circle Item on the Reader Service Postcard

SAFETY PRODUCT LITERATURE

Automotive Accessories

Yankee Metal Products Corp., 25 Grand Street, Norwalk, Conn., announces that their catalog for 1961 is now available. This 28-page book has the items cataloged in six sections: Passenger Car Safety Products, Truck Turn Signals, Truck Lighting Equipment, Truck Mirrors, Emergency Equipment, and Marine Equipment and Accessories.

For more details circle No. 81 on enclosed return postal card.

Driveway Markers

A new bulletin descriptive of Driv-Gyds, light reflecting driveway markers, is announced by Speco, Inc., 7308 Associate Avenue, Cleveland 9, Ohio. Illustrated with line sketches, the leaflet states that Driv-Gyds are made of lightweight galvanized steel rods with 3 strips, each 2 inches wide, of weather-resistant, light reflecting material. Pointed on one end for driving into the ground and packed 4 to a set.

For more details circle No. 82 on enclosed return postal card.

Traffic Guide System

An illustrated 16-page booklet available from American-Marietta Co., 3400 13th Ave. South, Seattle 4, Wash. This marking system is said to offer brilliant nighttime visibility even under common rain and fog conditions. Reflective glass-beaded plastic discs are applied to form a traffic line which can be seen even when surface water makes conventional painted stripes disappear. An epoxy-type adhesive is said to bond the markers to the surface with massive strength when applied with the company's equipment. Highway and laboratory tests establish that you can expect original brilliance for as long as twenty years in heavy traffic areas.

For more details circle No. 83 on enclosed return postal card.

Automatic Traffic Marker

Change traffic patterns quickly, safely, and at desired intervals. Control can be by time-clock, radar, radio or switch. Details available from Nationwide Traffic Engineering Products Corp., 2535 Mt. Carmel Ave., Glenside, Pa.

For more details circle No. 84 on enclosed return postal card.

Reflective Street Sign

Made of one-piece extruded aluminum, which incorporates a double-faced sign blade complete with supporting fixtures. Known as EA-15 it is furnished with "Scotchlite" reflective sign faces. Municipal Street Sign Co., 128-14, 14th Ave., College Point 56, N. Y.

For more details circle No. 85 on enclosed return postal card.

Controlled Light for Highway Signs

Bulletin 300-21, available from Revere Electric Mfg. Co., 7420 Lehigh Ave., Chicago 48, Illinois, describes Fluoresigns, high-level controlled light for highway signs, contributing to safe, smooth traffic flow.

For more details circle No. 86 on enclosed return postal card.

Traffic Signals

This bulletin tells all you want to know about the complete line of Econolite traffic signals; kinds, sizes, advantages, specifications. Available from Econolite Corp., 8900 Bellanca Ave., Los Angeles 45, California.

For more details circle No. 87 on enclosed return postal card.

Safety Barricades

Literature is available describing Guard-Gates, reflectorized Temporary warning devices for use on highway or in-city traffic emergencies, for construction projects, for hazard-warning applications. Compact and practical. West Side Iron Works, Inc., 327 Front Ave., N.W., Grand Rapids 4, Michigan.

For more details circle No. 88 on enclosed return postal card.

Driver Education

This brochure describes how the Drivotrainer system can make a contribution to safe driving in your community. This system permits one teacher to instruct up to 24 students simultaneously. Rockwell Mfg. Co., 400 N. Lexington Ave., Pittsburgh 8, Pa.

For more details circle No. 89 on enclosed return postal card.

Traffic Safety Cones

Traffic cone markers in bright fluorescent red for high visibility, and made of one-piece rotationally-cast plastisol for longer life is described in literature available from Jobet Industries, Inc., 447 W. South Park Ave., Oshkosh, Wis.

For more details circle No. 90 on enclosed return postal card.

Safety Vest

A fluorescent blaze orange vest for traffic patrolmen and other personnel involved in traffic signaling. Made of plastic impregnated material, the garment is perforated for ventilation and is said to fit all persons. American Optical Co., Southbridge, Mass.

For more details circle No. 91 on enclosed return postal card.

Off-The-Job Employee Safety

Available from Beam's, 13th and North Robinson, Oklahoma City, Oklahoma is an off-the-job safety educational program to encourage employes to install and use safety belts in their personal cars.

For more details circle No. 92 on enclosed return postal card.

Mechanical Supervisor

Bulletin SU-140 describes how when you equip your trucks with Tachographs, you put a supervisor in the cab of each truck. This "silent supervision" helps keep your trucks rolling safely, economically. Wagner Electric Corp., 6400 Plymouth Ave., St. Louis 33, Mo.

For more details circle No. 93 on enclosed return postal card.

Reflective Beads

Highway signs and markers reflectorized with lead-free Flex-O-Lite beads contribute greater safety for the motoring public and greater satisfaction and economy for you according to the manufacturer Flex-o-lite Mfg. Corp., P. O. Box 3066, St. Louis 23, Mo.

For more details circle No. 94 on enclosed return postal card.

Sound Meter-Analyzer

The control of vehicular noise, due to faulty mufflers, hornblowing, squealing brakes, etc., is easy with the new, simple-to-use sound analyzer. Write for bulletin RA-100. Industrial Acoustics Co., Inc., 341 Jackson Ave., New York 54, N. Y.

For more details circle No. 95 on enclosed return postal card.

Educational Traffic Signal

Small, portable traffic signal designed to fill a gap in the safety education field. Light-weight and self-contained it can be used indoors or out by plugging it into a 115V receptacle or an automobile cigarette holder. The case is 27½" x 12¼" in diameter. With the signal mounted on the case the height is 54¾". Littlefield-Alger Signal Co., Inc., 235 Merrick Road, Rockville Center, N. Y.

For more details circle No. 96 on enclosed return postal card.

Distress Flares

An excellent addition to the emergency kit of any car or truck. These hand-held flares are self-igniting and cannot be extinguished by wind or rain. Each flare produces a brilliant red light visible for miles for 10 minutes. Distributed in a kit of three flares. Ferrell Mfg. Co., Groton, N. Y.

For more details circle No. 97 on enclosed return postal card.

America's Driving Habits

From Page 34

familiar with the field of traffic safety you will be surprised to learn the number of groups and agencies that are involved in the great cause of making motoring safer. Each of these groups attacks the problem from a different angle and makes its own contribution to the end objective. Among these are your local safety council, the safety committees of your church or service club, the high school driver training group, and many others. Support these in every way you can. You can learn a great deal from them.

By consciously and intelligently exercising your God-given influence over others in the interests of traffic safety, you can make better drivers of the persons who are close and important to you. And better driving prevents accidents. The effect of your influence multiplied by that of millions of others can eventually bring about a massive re-orientation of public attitudes toward the motor car and thereby save thousands of lives each year.

The story of influence in traffic safety has another dimension. In this article we have been concerned mainly with the influence the private citizen can exert on the driving behavior of others. There is another group that has an even greater potential for influencing driving habits. This group comprises the owner/managers of small business, industrial or service establishments whose employes drive company owned trucks or passenger cars. These persons have a special contribution to make to traffic safety and for them there is a special program made up of four main essentials:

1. Set a Standard of Driving Performance
2. Show Your Drivers How to Meet it
3. Keep Score on Individual Drivers
4. Recognize Good Performance

In next month's article, we shall discuss the first point in the program, how to establish a sensible standard of safe driving performance for company drivers.

They Out-think Disaster

From Page 35

available. Usually a small extinguisher is also carried in the cab.

Our safety maintenance includes:

- Periodic testing of relief valves and excess flow valves (checked at least yearly, but more often with new tanks which have a scaling problem).
- Monthly check on strainers to make sure lines are not choked with scale.
- Provision of tapered wood plugs for use in emergencies. They can be used to stopper a broken valve or broken pipe effectively.
- Monthly inspection of tanks by supervisors for painting, readiness of fire extinguishers and hose condition.
- Proper requalification of truck tanks as required by ICC.

Here are the standards we set for ourselves in our station design and procedures:

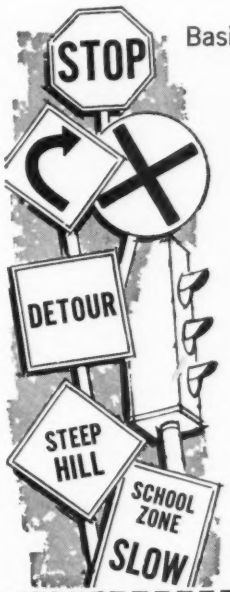
—Isolate the truck charging spot from plant buildings or storage tanks.

—Insist that driver leave truck keys at rear of truck during deliveries rather than in the cab. That way he must go to the rear of the truck where he can also make sure no filling hose is connected. (Electrical systems are available for this purpose, but we find the key system is more effective.)

—Trucks parked after filling, by a night attendant for instance, are parked away from the charging spot and isolated from each other by at least one truck length.

—Trucks are not parked near buildings where there is a means of ignition, nor near flammable materials which might expose the truck to fire.

When gas shipments are received by transport, tank trucks should not make it necessary to violate any of the above rules.



Basic tool of efficient truck management

WAGNER®-SANGAMO
TACHOGRAPHS

help you plan better routes

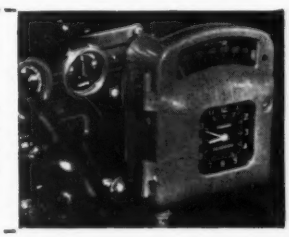
A Tachograph mounted in a truck cab is almost like having a supervisor ride along on every trip. For Tachographs graphically record every mile, every foot of every trip on 12 or 24-hour disc charts, or on 8, 15, or 31-day strip charts. This "silent supervision" costs only a few cents a day . . . provides *data that pays off in greater fuel and tire savings, eliminates unscheduled stops, cuts wasted time, and helps you plan better routes.* Wagner® Sangamo Tachographs are made in the U.S.A. Parts and service are readily available.

Wagner Electric Corporation
6467 Plymouth Ave., St. Louis 33, Mo., U. S. A.

Please send FREE copy of Bulletin SU-140.

Name_____
Company_____
Address_____
City & State_____
We operate_____ Vehicles
(Number)

WS61-6



Circle Item No. 6—Reader Service Card

Survival Car II

From Page 16

Essentially, both chairs are fabricated and are so secured to the floor of the car that they will retain the passengers against a 30 g crash and a resultant 5,000 pound blow from the front, the left, the right, and from the rear.

Whip-lash protection is also afforded the driver and the passengers. Attached to each chair, at the correct elevation for the head, is a medium to protect the heads of all occupants during a rear-end collision.

Steering

In the preliminary investigations, it was proved that the driver of a vehicle is subjected to two severe injury possibilities. They are:

1. Projection of the steering wheel rim into abdomen.

2. Projection of the steering wheel post, cracked or broken during a crash, into the chest or face.

In order to overcome these hazards caused by the steering wheel rim or post, a collapsible steering mechanism has been developed. Essentially, it consists of a flexible shaft and a steering wheel which will collapse in a forward motion in the event of an impact with any other object.

A 21-in. flexible shaft is inserted between the gear box and the car's fire wall. This flexible shaft, a group of piano wires, is designed to give the necessary torque to turn the car to the right and to the left. However, in a concentric direction, this shaft is an unstable column. Therefore, in an accident of the head-on type, when the gear box is forced towards the fire wall, the flexible shaft will collapse and thus prevent the gear box from driving the steering shaft in the direction of the driver's chest.

In addition to the flexible shaft arrangement, a telescopic tubing is attached to the dashboard of the car. Operating between the dashboard and the fire wall, it is installed so that the steering wheel will collapse in the event of any forward-direction impact with any foreign object.

There are two other important safety elements that should be noted in regard to the steering assembly. The rectangular steering wheel has been reduced to a very small, but comfortable size. It is approximately 2/3 smaller in diameter than the average steering wheel of conventional automobiles. This has been done in order to insure greater visibility for the driver, an important consideration when the driver is of small stature and has difficulty in looking over the rim of an average sized wheel.

Because the driver has a smaller diameter steering wheel, faster turning ability, improved maneuverability, and greater driving stability is attained.

This reduction in driving wheel diameter is made possible because the car has power steering. It takes only approximately 7 pounds of pressure to turn the wheels with this power steering mechanism.

There is a relatively large distance between the driver's knee and the wheel in the collapsed position. The wheel was designed in this manner in order to prevent the collapsing telescopic section and the wheel from hitting the driver's kneecaps, an accident which produces a severe rupture injury.

Containment

The capsule chair alone, as previously indicated, will contain the driver in any "action" from the rear, the left side, and the right side. By itself, no protection is afforded at the front. Therefore, it was necessary to devise a method of containment so that the head and body of the driver would not contact any part of the car in a head-on collision situation. The method of containment consists of a lap belt with a special three way buckle. This buckle will take the connection of the lap belt and the two connections of the shoulder harness. The lap belt has a resistance to breaking of 10,000 pounds and the two shoulder harnesses have a resistance of 5,000 pounds. This affords a factor of safety of 3 against a failure of containment for the occupants.

THE "EYES" HAVE IT . . . .

Here is an aid that has proven practical in teaching visually the principles of safety. It's simple, effective and works wonders in teaching your drivers.
The MAGNO SAF-T BOARD is the result of studies by outstanding safety instructors and engineers. Safety directors, traffic managers, driving instructors, insurance agents and adjusters get a clear picture of how accidents occurred visually by reconstruction of conditions.

It is now being used from coast to coast by fleet owners, insurance and public utility companies, colleges and schools, and many other concerns interested in public safety. Consisting of a BOARD with typical street intersections on one side. The other side is a BLACKBOARD on which any street or road situation can be drawn with chalk and then erased. It has scale models of vehicles, traffic markers and accessories that can be placed in any conceivable traffic situation.

Write for our folder. It contains full information.

MAGNO SAF-T BOARD© **EMIGSVILLE, PA.**

Circle Item No. 7—Reader Service Card

Safety Braking

Complete braking safety to passengers of the car is assured through the utilization of an in-the-line safety brake device. This unit is designed as a shut-off for either the front wheel or rear wheel sections of any hydraulic brake system.

The safety brake device is installed as a tee from the car's master cylinder to the two lines supplying the front and rear brakes respectively. Normally, its piston is held stationary by friction between the cylinder walls and a circumferential snap spring. In case of line failure, the piston is carried with the flow until it blocks off the exit port and, thus, will allow use of the remaining pair of brakes.

In the case of failure due to applied pressure of the brake system, a dangerous and common occurrence, the device will act to prevent the loss of appreciable amounts of fluid. In the case of an unrestricted failure, generally caused by a torn or cut line followed by brake application, the device will also prevent the loss of braking fluid. This latter condition is uncommon, but is quite dangerous.

Road Tests

"To date," states Engineer Crandell, "our Survival Car has been road-tested for more than 5,000 satisfactory miles. The capsule has shown itself to be extremely comfortable."

"In sponsoring the reconstruction and design of this completely functional passenger car solely for safety," said Bryan E. Smith, Liberty Mutual president, "our hope is that it will stimulate the forces already at work producing safer automobiles. Containment, through the medium of lap belts and shoulder harnesses, will markedly increase the chances of passenger survival by keeping the occupants inside a vehicle in a crash situation. It is imperative that there be a lessening of the fatalities and injuries now occurring year-in and year-out on our nation's highways."

Legislative Hopper

From Page 21

North Dakota—S. 180—requires cars manufactured after January 1, 1962 to have turn signals in good working order—approved.

Speed Limits

New Bills Introduced

California—H. 1916—exempts physician answering emergency call from speed limits. H. 1991—increases speed limit for vehicle towing trailer to 55 m.p.h.

North Carolina—H. 235—repeals provision exempting ambulances from speed limits.

Ohio—S. 373—repeals 40 m.p.h. speed limit on rural highways at night. S. 502—fixes times during which 20 m.p.h. speed limit shall apply in school zones.

Vermont—H. 251—imposes $50 fine for driving so slow as to impede traffic.

Action and Additional Information

Georgia—H. 104—prohibits racing on public highways—passed by substitute, Senate; House concurs in Senate amendments.

Iowa—S. 201—fixes 60 m.p.h. maximum speed limit for trucks and tractor semi-trailer combinations of 48,000 pounds or more—passed House.

Executive Action

Indiana—H. 18—requires red flag or flashing red light on rear of farm implement or road tractor operating at less than 20 m.p.h.—approved. H. 284—fixes 40 m.p.h. prima facie speed limit on unimproved highways—vetoed.

North Dakota—S. 81—amends speed limit to require driving in careful manner, rather than at reasonable speed. S. 78—changes speed limit to 60 m.p.h. at night, and 70 m.p.h. during day, permits designation of some Interstate routes for 75 m.p.h. both approved.

Driver Licensing

New Bills Introduced

Arizona—H. 238—requires physical examination of driver licensees.

Illinois—H. 530—requires vision tests for driver license applicants.

Michigan—H. 520—requires physical examination of driver licensees over age 50 and prohibits person under 18 from driving at night without special approval.

Action and Additional Information

Maine—S. 368—requires driver who is over 50 to prove visual acuity of 20/40 with one or both eyes as condition to renewal—passed Senate.

Executive Action

Montana—S. 132—relates to probationary licenses for unsafe drivers—approved.

Washington—S. 90—abolishes conditional driver licenses that restrict drivers with defective vision—approved.

ONE MAN SPEED ENFORCEMENT
"22" AUTOMATIC SPEED-WATCH
NEW! NEW! NEW!
Check these features:
• Provable Accuracy
• Automatic Operation
• One Man Control

• 22' Timing Area
• Midgit Road Tubes
• No License Necessary
• Low Cost
Write Today!
TRAFFIC HOUSE, INC.
Marshall 2, Michigan
Solve YOUR Safety Problem
Circle Item No. 8—Reader Service Card

YOUR CHILDREN'S
SAFETY
IS OUR BUSINESS
. . . GRAUBARD'S SCHOOL SAFETY EQUIPMENT IS NATIONALLY KNOWN
as the school safety equipment "That Promotes Safety." It does this by fulfilling both of the conditions essential to a really effective Safety Patrol.

FIRST, it gives each patrol member a sense of responsibility and a pride in doing his job well.
SECOND, being "Standard Equipment" it is recognized by school children and motorists alike, assuring their respect and complete cooperation.
Write Today!
for Free Catalog and complete information and prices.
GRAUBARD'S
236 HIGH STREET
NEWARK 2, NEW JERSEY
Circle Item No. 9—Reader Service Card

Rural Roads

From Page 25

Most car-train crashes are caused by overdriving headlights, obstructed vision and simple failure to obey warning signs. When a crossing is near the home of a driver, he tends to become too familiar with it and doesn't use proper caution. Other drivers misjudge their speed, ignore signals or try to challenge a train after they have been drinking.

Drivers who crash trains ignore signs and signals to do it. It is the responsibility of all highway users to heed the markings of highway-rail grade crossings and to cooperate in the fight against these tragic crashes.

"To a farmer, the most important road in the world is the one that runs by his farm," says NSC's President Howard Pyle. "Because of the frequency with which the farmer uses his road, both he and his family can be in great danger unless that road is safe for everyone."

Our rural highway system is highly important to farmers. On the public roads, farm people go to trading centers, their produce reaches markets fast and in better condition, and rural social life has been facilitated by good roads.

Intelligent use of the roads requires understanding, courtesy and judgment. Caution, forethought and consideration are the basic ingredients for all prescriptions for rural highway safety. A typically rural American characteristic — neighborliness — can help to increase safety on public roads.

The facts of rural highway safety can be forcefully brought to the attention of every farm resident. There are many things safety organizations can do. Here are some pointers for any one planning a farm safety program.

- A proclamation by a governor or local officials will lend prestige to your highway safety efforts.

- Use local accident facts to add significance to your campaigns.

- Enlist the help of newspaper editors and local radio and TV people. Broadcast media and newspapers can be used to inform farm residents of highway dangers and to advise the rural population on what they can do to decrease traffic accidents.

- Posters, filmstrips, movies and exhibits or demonstrations are all effective means of bringing home the subject of highway safety to farm residents.

- Community meetings and other local activities also can be utilized to call attention to better highway safety in rural areas.

- Be sure to coordinate your efforts with all other groups interested in traffic safety.

New Vacation Booklet Ready

Employers who wish to launch their employes on safe and happy vacations will be interested in a new National Safety Council pamphlet, *Vacation Countdown*.

The eight-page illustrated brochure gives helpful tips on preparing for the family vacation. It also suggests how to make the trip safe and how to get the most out of vacations, whether traveling or staying at home.

It emphasizes water safety and the dangers of over-exertion, with special notes for do-it-yourselfers who spend their vacations around the house.

This new booklet is made to order for a company's off-the-job safety program, and is also suitable for distribution by safety councils and other safety minded civic groups.

A single sample copy and further information on *Vacation Countdown* is available from the National Safety Council, 425 N. Michigan Ave., Chicage 11, Ill.

ADVERTISERS' INDEX

Beams Mfg. Co. 4

Flex-O-Lite Mfg. Co. 42

Graubard's Inc. 49

Harley-Davidson Motor Co. ..... I.F.C.

Magno-Saf-T Board 48

Sales Aid Co. 50

Stephenson Corp. 44

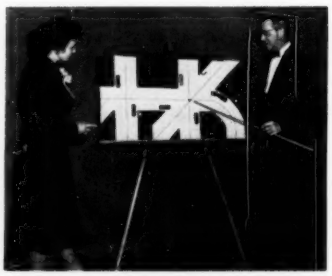
Traffic House Co. 49

Wagner Electric Co. 47

West Side Iron Works 43

MAGNETIC

"VIZ-U-LIZER"



Board consists of (3) interchangeable sections—14" x 22" each—Enables you to simulate various intersections. Back has replica of 4 lane highway and blackboard surface for special situations.

World-wide acceptance by driver education instructors, insurance adjusters, lawyers, magistrates and safety engineers.

Scale model vehicles and traffic equipment supplied.

For details write

SALES AID CO.
354 Nassau St.
Princeton, N. J.

Circle Item No. 10—Reader Service Card

Use the READER SERVICE POSTCARDS

- **to obtain information on advertised products**
- **to obtain material on new products and literature**
- **to order subscriptions to TRAFFIC SAFETY**

Here's how to use card #2—the first set of numbers is keyed to products advertised throughout the magazine, the second set to items shown in the New Product section and the third set to the Safety Products Literature section. Simply circle the number of any item in which you're interested and we'll ask the manufacturer to send you full information without obligation. No postage is required when the card is mailed in the United States.

Advertised Products

—are included for your benefit to help you solve accident problems. To get full information on a product in which you are especially interested, circle the corresponding page number on the Reader Service Postcard.

New Safety Equipment

—shown in the special section, has been carefully reviewed. Only new products or newsworthy improvements in existing equipment are considered eligible for inclusion in this listing.

Safety Product Literature

—are catalogs, brochures, spec sheets and booklets describing equipment and services to help you solve your traffic safety problems. You can build a valuable reference file with these free publications.

IMPORTANT—Be sure to fill in your name, organization and address in the space provided on this side of the post card.

1

Traffic Safety
Good Start: Traffic Deaths Still Going Down
SPEED CONTROL
The Rural Problem
The City Problem
and "Operation Safety" blueprints a speed control program

JUNE, 1961

Prices are subject to a 10% discount to National Safety Council Members

	1	2 TO 9	10 TO 99	100 TO 999
Subscription (12 issues) ea.....	$4.50	$4.00	$3.50	$2.80

(Add $.70 per subscription for foreign except Canada and Pan American Union)

U.S. GOVERNMENT INSTALLATIONS NOTE—This item has been approved for purchase by the Federal Supply Service. DO NOT USE THIS ORDER FORM. Refer to "Price list of N.S.C. Materials to U.S. Government Agencies."

Send _____ subscriptions to Traffic Safety (311.01)

In ordering subscriptions for members of your staff attach separate sheet showing names and addresses so that we can send their magazine directly to them each month, without delay.

All prices shown are based on a single order for delivery in one shipment to one destination (one shipment per month on annual subscriptions). Quantities are not cumulative over a period of time, or for a number of locations, to obtain quantity prices.

SEND INVOICE TO: MY ATTENTION ☐ COMPANY ☐

NAME.....

POSITION.....

COMPANY.....

ADDRESS.....

CITY & STATE.....

2

JUNE, 1961
(good until August 31, 1961)

PRODUCTS ADVERTISED

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35

NEW SAFETY EQUIPMENT

41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

SAFETY PRODUCT LITERATURE

81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

NAME.....

POSITION.....

COMPANY.....

ADDRESS.....

CITY & STATE.....

The advertising pages of Traffic Safety

. . . your guide to products of importance to your safety program

Keep up-to-the minute on all the latest advances in traffic and transportation safety products and services through the advertising pages and new equipment editorial features in Traffic Safety.

Should you want additional information or special consultation on your specific problems, don't hesitate to write to the manufacturers. They welcome your inquiries and will answer your questions without obligation.

Although the Council does not test or examine the products advertised or mentioned in the editorial features, staff engineers and technicians review all product information in an effort to determine that descriptions and performance claims are accurate. It should not be construed, however, that commercial products are approved or endorsed by the National Safety Council.

FIRST CLASS
PERMIT No. 834
CHICAGO, ILL.

BUSINESS REPLY CARD
No Postage Stamp Necessary If Mailed in the United States

5c—POSTAGE WILL BE PAID BY—

Reader Service Department

TRAFFIC SAFETY
425 NORTH MICHIGAN AVENUE
CHICAGO 11, ILLINOIS

FIRST CLASS
PERMIT No. 834
CHICAGO, ILL.

BUSINESS REPLY CARD
No Postage Stamp Necessary If Mailed in the United States

5c—POSTAGE WILL BE PAID BY—

Reader Service Department

TRAFFIC SAFETY
425 NORTH MICHIGAN AVENUE
CHICAGO 11, ILLINOIS

Before you mail your Reader Service Postcard . . .

TAKE ANOTHER LOOK AT

- the ADVERTISING pages
- the NEW SAFETY EQUIPMENT section
- the SAFETY PRODUCT LITERATURE section

Make sure that all the items you want to know about are circled . . . check to make sure that your name, organization and address are printed on the reverse side of the postcard . . . THEN mail it today.

The quality of leadership!

The leaders of hundreds of America's major industries have, for twenty years, matched beliefs with action by supporting the Payroll Savings Plan for U.S. Savings Bonds. On this, the 20th Anniversary of this great idea, we salute the quality of leadership which continues to use this plan to create reserve public buying power, improve employee morale and strengthen the economy of our country. To learn how your company can benefit from the Payroll Savings Plan, write: **U.S. SAVINGS BONDS DIVISION, TREASURY DEPARTMENT, Washington 25, D.C.**

20th ANNIVERSARY 1941 1961

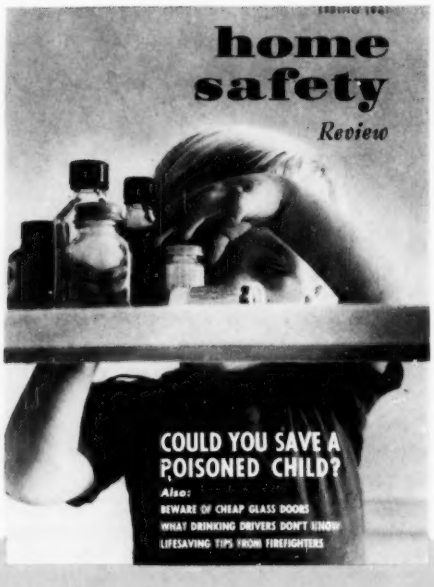
National Safety Council

The U.S. Government does not pay for this advertisement. The Treasury Department thanks, for their patriotism, The Advertising Council and the donor above.

Safety Facts Your Employees Should Know...

and can read about in the next two issues of

HOME SAFETY REVIEW



SPRING ISSUE

Hazards of Sliding Glass Doors. Some are now made of such thin, fragile glass that they shatter at the slightest blow, as many unfortunate homeowners have discovered. Solution: shatterproof glass.

What Drinking Drivers Don't Know. The carefree driver who has had just a few drinks is more dangerous than the sodden drunk.

How to Use the Telephone in an Emergency. How to save valuable seconds by knowing who to call, what to say, how the operator can help.

Lifesaving Tips from Firefighters. Firemen point out six vital safety rules: never leave children alone; don't smoke in bed; get out of a burning building immediately; never enter a burning building; don't jump from a window; plan your escape from fire.

Don't Invite Snakebite. How to avoid snakes, what to do if you encounter one, and what to do if you are bitten.

What Would You Do if Your Child Ate Poison? Practical emergency treatment for poisoning, including answers to such questions as: should you give an antidote? should you make the child vomit? should you call the doctor first?

Spring Check-up for Ladders. How to examine your ladder to see if it is safe for use. A few minutes of caution that can avoid serious injury.

PLUS SHORTER FEATURES:

What to Do in Case of a Tornado.
Ten Top Safety Cartoons from the Saturday Evening Post.
Hazards of Using Lacquer Sprays in the Workshop.
Do You Drive Like a Champion?

SCHEDULED FOR SUMMER ISSUE

Exciting New Ways to Teach Your Child to Swim. The fun-way through use of games. Photos and detailed instructions.

Poison the Bugs, Not Yourself. Constantly coming on the market are new pesticides with strange names and ingredients. Some can be dangerous. Here's what you should know to handle them safely.

Scuba Diving: the Fun and the Dangers. This exciting sport that has captured the nation's interest can be hazardous, even for the experienced diver. Safety pointers, especially for the novice.

Are You Emotionally Fit to Drive? Psychologists say your attitudes determine whether or not you're heading for an accident. What are emotional danger signs? How can you spot them and avoid them.

Five Reasons to Beware a Power Mower. These five reasons are five different personal stories. All are tragic, and all concern the effect a power mower accident has had on someone's life.

"I Didn't Know the Gun Was Loaded." So goes the pathetic cry each year of dozens of persons who accidently shoot friends and relatives. The moral: never keep a loaded gun in the house.

PLUS SHORTER FEATURES:

It's Simple to Install Seat Belts.
Know Your Buoys.
What Would You Do in This Emergency?
Poisonous Plants in Your Back Yard.

HOME SAFETY REVIEW . . . the new family safety magazine that people like to read. Write for information on special low bulk subscription rates, and request a FREE SAMPLE COPY.

HOME SAFETY REVIEW

Published quarterly by the

NATIONAL SAFETY COUNCIL

425 N. MICHIGAN AVE., CHICAGO 11, ILLINOIS